

354.7295
P 8381
1942/43

REPORT
OF THE
COMMISSIONER OF THE INTERIOR
OF
PUERTO RICO

FOR THE FISCAL YEAR ENDING JUNE 30, 1943

TO THE
HON. GOVERNOR OF PUERTO RICO



SAN JUAN, P. R.
INSULAR PROCUREMENT OFFICE
PRINTING DIVISION
1943

REPORT
OF THE
COMMISSIONER OF THE INTERIOR
OF
PUERTO RICO

FOR THE FISCAL YEAR ENDING JUNE 30, 1943

TO THE
HON. GOVERNOR OF PUERTO RICO



THE LIBRARY OF THE

NOV 14 1946

UNIVERSITY OF ILLINOIS

SAN JUAN, P. R.
INSULAR PROCUREMENT OFFICE
PRINTING DIVISION
1943

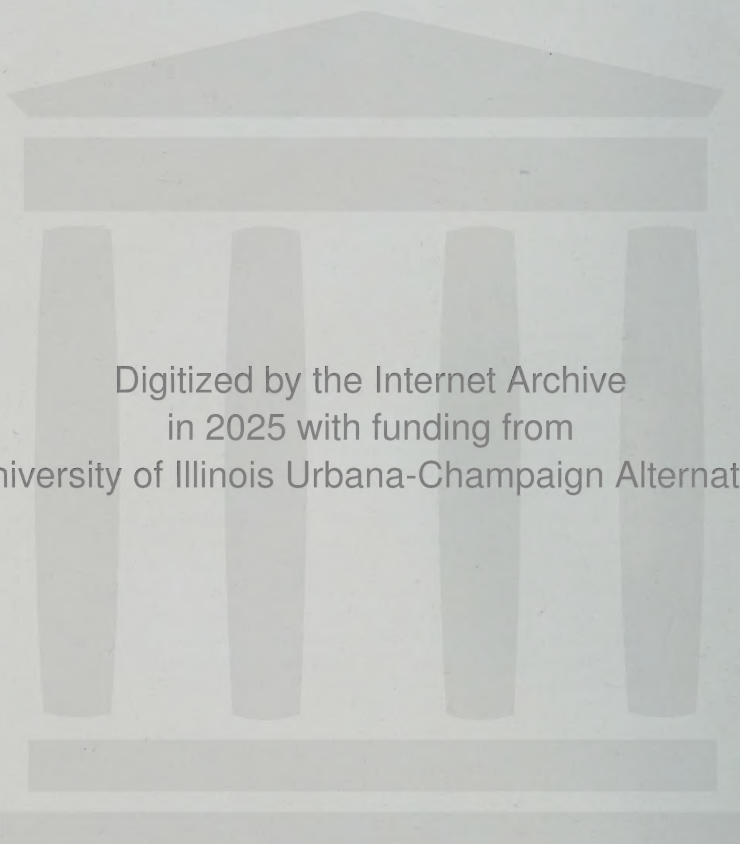
Department of the Interior in the Military Service

José Enrique Colón
 Jorge V. Dávila
 Bernardino Sánchez
 Jorge V. Toledo
 Gilberto Barbosa Sicardo
 Ricardo E. Capriles
 Víctor Cardona
 Enrique Castillo Aray
 José Hernán Cestero
 Guillermo Corbella
 Anna Corbella
 Héctor A. Deliz
 Juan G. Lube
 Jorge Mussenden
 Juan E. Morales
 Humberto Torres
 Mario Bonnin
 Pedro González Dulis
 Luis A. Capó
 Carlos Aluira Torres
 Hugo Bustamante
 Víctor José Colón.

Luis M. Mendoza
 Rafael T. González
 José Gil Cardona
 Joaquín R. Puertes Garza
 Juan López Deyá
 Aníbal Pielvi
 José E. Rodríguez
 Alfonso Dauway
 José Suárez Guirayo
 Albaldo del Toro
 René Aguilín Jr.
 Ángel Sanjurjo
 José A. Lago
 Julio H. Montilla
 Ignacio Bonit
 Rafael Calderón
 Simón Amador Amador
 Germán Morales García
 Rafael Hernández
 Arturo Abrams de León
 Ismael Torres Macías
 A. Müller Piñero
 José Medina

José Figueras Rierman
 Tulio Rodríguez Serret
 Miguel A. Balasquide
 José S. Vernier
 Luis Cabrera
 Aníbal Capó
 José Marcuach
 Milton Quinones
 Wilfredo Vincenty
 Luis A. Cordero
 Ernesto Pérez Cardona
 Gabriel Pons Arborea
 José A. Mulet Jr.
 Osvaldo M. Izquierdo
 Frank Cuevas Benítez
 José C. Tormos
 Ramón F. Lago
 Francisco Rivera Aponle
 Manuel Sanjurjo
 Arnimundo Nuñez
 Ernesto Acosta
 Félix Andrade

ROLL OF HONOR
 DEPARTMENT OF THE INTERIOR PERSONNEL IN THE
 MILITARY SERVICE.



Digitized by the Internet Archive
in 2025 with funding from
University of Illinois Urbana-Champaign Alternates

354.7295

P8381

1942/43

INDEX

	<i>Pages</i>
Personnel -----	7-8
Commissioners of the Interior from 1900-1943-----	9
Duties of the Commissioner of the Interior-----	10
Report of the Commissioner of the Interior-----	11-19
Division of Survey and Design of Highways, Roads and Bridges----	20-24
Division of Construction and Inspection-----	25-38
Maintenance and Repair of Highways, Roads and Bridges-----	39-49
Division of Public Buildings and Municipal Works-----	50-63
Bureau of Public Lands, Archive and Aerial Map-----	64-68
Automobile and Traffic Bureau-----	69-73
Bureau of Mines-----	74-76
Bureau of Docks and Harbors-----	77-80
San Juan Harbor Board-----	81-87
Engineering Division for Piers and Harbors-----	88-91
Muñoz Rivera Park Commission and Service of Parks and Recreation--	92-100
Division of Accounts and Disbursements-----	101-102
Isabela Irrigation Service-----	103-138
Tables and Diagrams of the Irrigation System—(Tablas y Diagramas del Sistema del Riego)-----	141-156

14446 dig. 1942/43-1944/45-
und.

September 22, 1943.

THE HONORABLE,
THE GOVERNOR OF PUERTO RICO,
San Juan, Puerto Rico.

DEAR SIR:

Complying with the provisions of the act of the United States Congress, entitled "An Act to provide a civil government for Puerto Rico and for other purposes", approved March 2, 1917, I have the honor to submit for your consideration the annual report for the fiscal year ended June 30, 1943, concerning the work accomplished by the Department of the Interior.

Sincerely yours,

SERGIO CUEVAS,
Commissioner.

DEPARTMENT OF THE INTERIOR

PERSONNEL

1942-1943

OFFICE OF THE COMMISSIONER

Commissioner-----SERGIO CUEVAS.
Assistant Commissioner-----FRANK RULLÁN.
Administrative Officer-----JOSÉ FIDALGO DÍAZ.
Secretary-----CONCHITA CARMINELY.
Counsel-----FEDERICO TILÉN.

BUREAU OF PUBLIC WORKS

Superintendent-----IGNACIO M. SAAVEDRA.
Assistant Superintendent-----ANGEL (2) SILVA.

DIVISION OF SURVEY AND DESIGN OF HIGHWAYS ROADS AND BRIDGES

Principal Designing Engineer-----RAFAEL DEL VALLE ZENO (Acting).
Senior Highway Engineer-----CECILIO DELGADO.

DIVISION OF CONSTRUCTION AND INSPECTION

Engineer Director-----RODOLFO DEL VALLE.
Principal Engineer-----RAÚL LUCCHETTI.

DIVISION OF MAINTENANCE AND REPAIR OF ROADS AND BRIDGES

Engineer Director-----ENRIQUE ARANA.
General Inspector-----JOSÉ H. MÉNDEZ.

DIVISION OF PUBLIC BUILDINGS AND MUNICIPAL WORKS

Civil Engineer Director-----CARLOS A. MOLINA.
Associate Civil Engineer-----GUILLERMO J. FERNÁNDEZ.
Assistant Architect-----FIDEL SEVILLANO.
Superintendent of Public Buildings-----CAMILO GONZÁLEZ.

DIVISION OF PUBLIC LANDS AND ARCHIVES

Chief-----ARMANDO MORALES CANO.
Assistant-----EDUARDO CASTRO.

DIVISION OF AUTOMOBILE AND TRAFFIC

Acting Chief-----SAMUEL ANGELÍ.

BUREAU OF MINES

Director-----MARTÍN LÓPEZ SANABRIA (Acting)
Mining Engineer-----HORACIO T. RAY.

REPORT OF THE COMMISSIONER OF THE INTERIOR

DIVISION OF HARBORS AND DOCKS

Chief of Division and Captain of the Port--MANUEL HENRÍQUEZ.
 Assistant -----ANTONIO ANGULO.

OFFICE OF THE AERIAL TOPOGRAPHIC MAP

Chief Engineer-----ENRIQUE G. RUBIO.
 Draftsman-----BARTOLO H. RODRÍGUEZ.

ISABELA IRRIGATION SERVICE

Director and Chief Engineer-----ORLANDO R. MÉNDEZ.
 Assistant Chief Engineer and Superin-
 tendent-----DOMINGO PANAINI.
 Electrical Superintendent-----HERMINIO NIGAGLIONI.

DIVISION OF ACCOUNTS AND DISBURSEMENTS

Chief-----LUIS A. CUEVAS.
 Assistant -----EDUARDO ORTIZ GINORIO.

SAN JUAN HARBOR BOARD

Chairman-----SERGIO CUEVAS.
 Treasurer-----LUIS M. GUILLERMETY (Acting).
 Secretary -----FRANCISCO PEREDA.
 Chief Engineer-----LUIS M. GUILLERMETY.

COMMISSION AND SERVICE OF PARKS AND RECREATION

Director -----MIGUEL MELÉNDEZ ORTIZ.
 Assistant Director-----MIGUEL A. BARASORDA.

WAR EMERGENCY PROGRAM

Superintendent, Bridle Path Projects-----DOMINGO GRILLASCA.
 Superintendent, Municipal Projects-----LUIS SUGRAÑES.

INSULAR SEWERAGE SERVICE

Executive Director -----JACINTO URBINO.

COMMISSIONERS OF THE INTERIOR
1900—1943

Names	Appointed	Ceased
William H. Elliot.....	June 15 1900..	Feb. 8, 1905
John Stuart Elliot.....	Feb. 9, 1905..	Oct. 24, 1905
Laurence H. Graham.....	Nov. 4, 1905..	Jan. 5, 1910
John A. Wilson.....	Jan. 19, 1910..	Jan. 18, 1914
Manuel V. Domenech.....	Sept. 17, 1914.	Feb. 17, 1918
Guillermo Esteves.....	Feb. 18, 1918..	Oct. 31, 1921
John A. Wilson.....	Nov. 1, 1921..	April 25, 1923
Guillermo Esteves.....	April 26, 1923.	May 31, 1932
Fraucisco Pons.....	June 1, 1932...	July 1934
Manuel Egozene.....	Aug. 4, 1934...	July 8, 1935
José Enrique Colom.....	Aug. 9, 1935...	April 7, 1941
Sergio Cuevas.....	April 8, 1941..	To-date

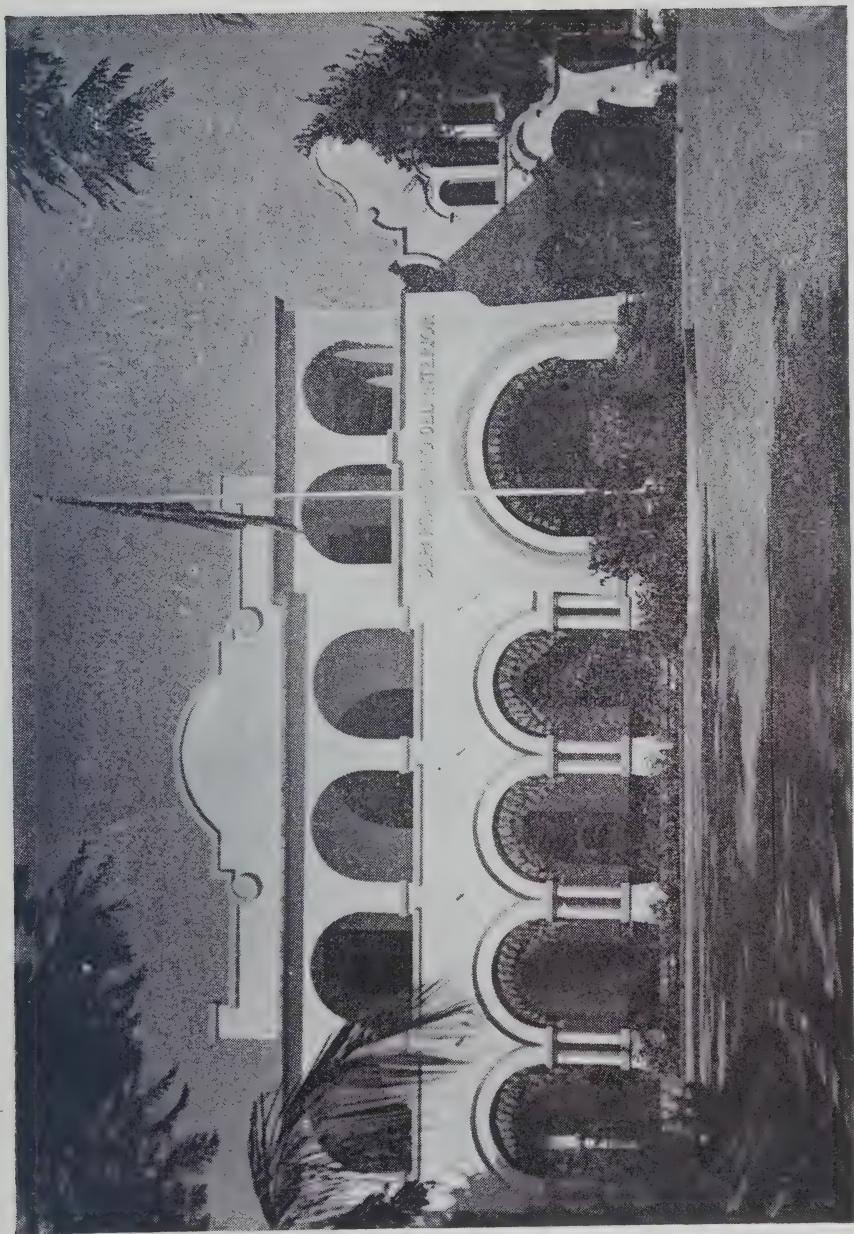
DUTIES OF THE COMMISSIONER OF THE INTERIOR

In addition to his specific duties in connection with the Department of the Interior, the Commissioner of the Interior is an ex-officio member of the following commissions:

- Executive Council.
- Supply Committee.
- San Juan Harbor Board.
- Amusements and Sports Commission.
- Board for the Preservation of Historical Relics.
- Committee on Prevention Against Accidents.
- Parks Commission.
- Park Commission, Aguadilla.
- Land Authority.
- Puerto Rico Water Resources Authority.
- Isabela Irrigation Service Commission.
- Transportation Authority.
- Communications Authority.
- War Emergency Council.
- Arecibo Harbor Authority.
- Insular Sewerage Service Commission.

He is by appointment of the Governor a member of the following commissions:

- Board of Trustees, Carnegie Library.
- Civil Defense Committee.



DEPARTMENT OF THE INTERIOR BUILDING, SANTURCE, ACQUIRED BY PURCHASE
FROM THE BLANCHE-KELLOGG INSTITUTE, JULY 1942.
Sergio Cuevas Bustamante, Commissioner of the Interior.

REPORT OF THE COMMISSIONER OF THE INTERIOR

Fiscal Year 1942-1943

SUMMARY OF YEAR'S WORK

The duties of the Commissioner of the Interior, as prescribed in Section 16 of the Organic Act for Puerto Rico, are as follows:

“The Commissioner of the Interior shall superintend all works of a public nature; is in charge of all public buildings, grounds and lands, except those belonging to the United States, and shall execute such requirements as may be imposed by law in regard thereto, and perform such other duties as may be prescribed by law.”

In addition to other provisions of the Organic Act, the Commissioner is a member of the Executive Council, and by provision of Insular Laws, ex-officio member of many government boards, commissions and authorities. He is also member of other government boards and commissions by appointments made by the Governor.

His membership in all these boards, commissions and authorities, involves the employment of much of his time and attention in the solution of problems and the performance of duties connected therewith, to the detriment of his incumbencies as Commissioner of the Interior.

The Department of the Interior carried out the activities prescribed by Law during the fiscal year 1942-43 under very pressing conditions brought about by restrictions imposed by the present war. Scarcity of materials and the lack of trained technical personnel delayed to a considerable extent the development of construction works, thus diminishing the possibilities of offering employment to our laborers. A considerable number of laborers were unemployed on account of the slowing down of the local industries, which in peace time, employed thousands of men. These men could not be otherwise employed as there are no war industries on the Island.

Notwithstanding these facts, the Department of the Interior was able to carry out construction works of a varied nature representing an expenditure of about \$4,500,000 out of Insular Funds. The expenditure of such an amount by the Insular Government offered opportunity to several thousands of laborers to earn their living during the year 1942-43, during which an expanded construction

program was carried out in close cooperation with federal agencies such as WPA and PRA. It is estimated that the combined effort of the Insular Government and the federal agencies represents an expenditure of almost \$12,000,000 for public works.

Besides the normal activities of this Department our personnel was at all times giving a most generous and decided cooperation to the Civil Defense, to the Armed Forces and to other departments of the Insular and Municipal governments.

All matters related to public works of the War Emergency Program, such as the construction of bridle paths, public buildings, repairs to roads, water-supply systems and other municipal works are being attended to by this Department in addition to our regular duties. It is estimated that the total amount involved in these projects is about \$2,000,000.

Although the program of public works was hampered by the difficulties experienced in obtaining materials and equipment, as well as technical personnel, the achievements of this fiscal year compare favorably with those of previous years.

BUREAU OF PUBLIC WORKS

As provided by law, the Bureau of Public Works is under the direction of a Superintendent, who is in charge of the surveying, construction and maintenance of public roads and bridges, harbors and docks and public buildings. This work is carried out by means of five divisions as follows:

Division of Survey and Design.

Division of Construction and Inspection.

Division of Maintenance of Roads and Bridges.

Division of Public Buildings and Municipal Works.

Division of Engineering for Harbors and Docks.

Each office is under the direction of an engineer, who, under the supervision of the Superintendent, performs all duties imposed on him by law, and, in addition, carries out the work assigned to him from time to time by the Commissioner.

ROADS AND BRIDGES

The Division of Survey and Design of Public Roads, completed during the year the survey of 68.7 kilometers of municipal or secondary roads and of 20.6 kilometers of main highways. Designs were completed for the construction of 32.8 kilometers of insular highways

at an estimated cost of \$1,122,000; of a grade separation project at Highway No. 2, with an estimated cost of \$104,000; of 110.8 kilometers of secondary roads estimated at \$1,810,000 and of a mayor structure across the Cibuco River estimated at \$129,000. Projects thus prepared represent an estimated investment in improvements amounting to \$3,165,000.

Total expenditures in survey and design were only \$130,964.41, or about 4 per cent of the total estimated cost of the projects.

Road construction is an old item in the history of public works in Puerto Rico. The first known effort towards this end, dates back to 1771 when engineers of the War Ministry of the Crown of Spain started construction of the "Carretera Central" from San Juan to Ponce. Work on this important highway was completed during the the last quarter of the nineteenth century, 1886, at a total cost of \$1,879,340 "pesos."

During the Spanish régime, there were built 253.6 kilometers of road, an average of .6 kilometers per year. As a tribute to the engineers who designed and constructed roads during the Spanish ruling, it is worthy of note that, among them, the portions of "Carretera Central" between Caguas and Coamo, and Road No. 4, between Cayey and Guayama, stand out as two splendid engineering works which are a credit to the engineers in charge of their survey and construction.

After the Treaty of Paris, which ended the Spanish-American War, the United States took sovereignty over Puerto Rico. Construction of new roads was immediately started and pushed actively to the present date; therefore having completed 2,746 kilometers in a period of 43 years. Average construction has been 60 kilometers per year or one hundred times the average obtained during Spanish days.

Road construction since Pearl Harbor has been expensive, slow and difficult; war has required the work to be done under conditions never before faced by the highway industry. Materials essential to modern construction and maintenance methods became so scarce that they could be obtained only under a strict system of priorities. Machinery and equipment used for construction and maintenance operations has been difficult or impossible to get.

The Department of the Interior, through its engineering staff and with the cooperation of the Federal Public Works Administration, has studied the situation, finding in many cases, adequate solutions.

During construction operations, radical changes in design to conserve critical materials, had to be adopted with resultant increases in cost and delays in completion.

Nevertheless, sixteen federal aid projects and 37 secondary road projects, the cost of which was defrayed with insular funds obtained from the gasoline tax were in operation during the year. The Work Projects Administration did splendid work on Road No. 2, San Juan-Punta Borinquen and has contributed very generously to the program of improvements to our main highway and in the construction of 12 secondary road projects. Works in progress during the year amounted to \$3,487,974, the expenditures during the same period being \$2,493,359.72. The total length of secondary and municipal roads under construction was 53.1 kilometers and of main highway, principally road No. 2, 55.91 kilometers.

Highway maintenance, according to the definition of the Public Roads Administration is the "preserving and keeping of each type of roadway, roadside, structure and facility, as near as possible to its original condition as constructed or as subsequently improved, and the operation of highway facilities to provide satisfactory and safe highway transportation."

During the years in which the present highway transportation system has been built up, the scope of maintenance and operation services has been greatly expanded. Beginning with the basic duties of upkeep and repair of roads and structures, these terms have come to include keeping the roads open in heavy rainy seasons, protecting traffic, promoting highway travel by creating convenient and attractive facilities and services along the roadside. Most of these highway services, are responsibilities of the Highway Maintenance Division.

Under ordinary conditions, pavement maintenance consists largely of patching and occasional repair of damage caused by the failure of the subsurface material. Early in the fiscal year and then again in May and June, extraordinary heavy rains caused very serious break ups and, roads in many parts of the island, were seriously damaged.

War imposed additional responsibility on maintenance in some sections of the island. In some cases, roadways have been kept in condition for their vitally important traffic by intensified maintenance operations; in others, it was necessary to almost reconstruct the surface.

This condition has contributed heavily to increasing maintenance cost during the year. Expenditures amounted to \$1,571,000, an average of \$500 per kilometer.

AÑASCO BRIDGE INJUNCTION

On July 23, 1940 the Commissioner of the Interior and the Superintendent of Public Works entered into a contract with Mr. Tomás Carro, as contractor, for the construction of a bridge over the Añasco River (Project FAP-3 (1) Mayagüez-Añasco Road) at a cost of \$197,362.25. By the terms of the contract the date of August 9, 1942 was set forth for the completion of the work. Notwithstanding our effective cooperation to avoid the inconveniency brought forth by war conditions, progress was excessively slow and in spite of extensions granted, by the end of the year 1942, only 81 per cent of the job had been performed.

Taking in consideration the urgently needed completion of this Bridge and in accordance with Section 7 of the Contract, the Commissioner took charge of the work without annulling the Contract and at the contractor's expense.

An injunction was filed by the contractor against the Commissioner and the Superintendent of Public Works, on February 9, 1943 and a Court issued a restraining order forbidding them to take charge of the work unless the contract was previously liquidated. The Department of Justice, assisted by our Service of Claims appeared for the defendants. The case was tried and definitely submitted and is still pending a decision.

PUBLIC BUILDINGS AND MUNICIPAL WORKS

This Division is in charge of construction and maintenance of public buildings and of the design and supervision of municipal works.

The estimated value of present insular public buildings is about \$10,000,000. Some of our public buildings were built two hundred years ago and others of more recent and modern construction, need constant and expensive repairs. The appropriation of \$125,000 a year for repair and maintenance of public buildings is, by far, inadequate. It is estimated that an amount of \$2,000,000 will be necessary to restore our present buildings to their original conditions.

Fifty-six school buildings, owned by municipalities, were repaired at a cost of \$200,000.

New school facilities were built or contracted for in the amount of \$250,000. Other new structures such as fire stations, office buildings, etc., representing a value of \$455,936, were either built or started.

The offices of the Department of the Interior were moved to its new building at Stop 22½, Ponce de León Ave., which was purchased at a cost of \$150,000.

Technical assistance was given to municipalities in the study and solution of local engineering problems and rural water supply systems were installed in several municipalities.

BUREAU OF PUBLIC LANDS AND ARCHIVES

Shortly after the discovery of Puerto Rico by Cristopher Columbus, in the year 1493, the Crown of Spain, by Act of Conquest, took possession of all the lands and mineral resources of the island. To Juan Ponce de León, as first Governor of Puerto Rico and his followers was imposed the task of colonizing the island with white people from the mother country, as the island was only inhabited by Indians. As an incentive to the prospective colonizers, the Government of Spain issued a proclamation allowing some of the settlers the right to usufruct the land and to others the right of common use of farms for agricultural and grazing purposes.

In the first case, lands were granted directly to the people who established themselves on the land; such farms were called "Hatos", while on the second case, in which no rights were granted, and the lands were for the common use of all surrounding neighbors, the denomination given was "Ejidos."

By royal decree of the year 1778, King Charles III of Spain, ordered that all lands belonging to the Crown be surveyed and subdivided into small tracts for distribution among the largest possible number of families, the object of such decree being to prevent ownership of very large estates by a few people. This was the first known attempt in the history of Puerto Rico to establish a policy by limiting the area that could be owned by a single family.

This policy was not successful at the time nor thereafter, and concentration of former public lands continued in the years to follow to the extent so well known to all the people of the Island.

In December 28, 1818, the Board for Distribution of Vacant Public Lands ("Junta de Repartimiento de Terrenos Baldíos"), was organized to grant concessions of public lands with the limiting proviso that the beneficiaries had to cultivate not less than half of

the area granted. If this stipulation was not fulfilled, the concession was cancelled at the end of ten years.

At the time of the American occupation of the Island most of its area belonged to private owners, acquired by concessions or transfer.

The task of policing public lands to prevent the construction thereon of squatter's houses, was carried out during the year. It is deemed necessary to enact a new law to assure safe operation of the purpose.

SERVICE OF CLAIMS AND LEGAL ASSISTANCE

This service is under the direct jurisdiction of the Commissioner. Claims were investigated and studied, cases were presented before the Civil Service Commission, the Public Service Commission and Insular Courts. Many cases involving legal questions were cleared and assistance was given to all the Chiefs of Bureaus and Divisions in matters of right-of-way, court procedures and interpretation of laws.

INSULAR TELEGRAPH

The Bureau of the Insular Telegraph and Telephone, which since the establishment of the Civil Government in 1900 was attached to the Department of the Interior, was transferred in December 1, 1942, to the recently created Communications Authority.

BUREAU OF AUTOMOBILES AND TRAFFIC

A new system for issuing license certificates for the operation of motor vehicles, was put into effect with satisfactory results.

A total of 28,156 vehicles were registered; collections for the year amounted to \$889,168.48, as against \$906,265.81 for the previous year.

HARBORS AND DOCKS

Vessels entering the various ports of the Island during the year yielded fees for a total of \$95,740.75.

The San Juan Harbor Board operated normally and after paying for all its expenses, covered a substantial balance into the trust fund. The Engineering Division of the Board completed all plans for the Arecibo Harbor Improvements where construction operations will be started early in August.

I am pleased to inform that the financial conditions of the San Juan Harbor Board are excellent. Receipts for the year were \$126,841.79; disbursements, \$81,477.21. Present cash surplus amounts to \$246,443.51.

MUÑOZ RIVERA PARK

COMMISSION AND SERVICE OF PARK AND RECREATION

Park movement is a full and positive contribution to the cultural development in the island. Back in the year 1919, park facilities were only for the benefit of the city of San Juan.

At present and by virtue of new acts created by the Legislature, park movement has been spread throughout the island. A wide program for cultural and public recreational activities is being developed.

ISABELA IRRIGATION SERVICE

Operating results of this Organization for the fiscal year ending June 30, 1943, were satisfactory and the prospective view for the coming year is very promising.

Production of electric energy in the district amounted to 9,692,720 Kw. Hrs., showing an increase of 1,942,600 Kw. Hrs. over the previous year. Only 114,500 Kw. Hrs. were purchased at the interconnection.

Total power generated and purchased amounted to 9,807,220 Kw. Hrs., or 229,547 Kw. Hrs. over last year.

Energy delivered to consumers in the district amounted to 5,361,115 Kw. Hrs. and energy sold at the interconnection was 2,903,034 Kw. Hrs. Total gross sale amounted to \$259,288.07.

New extensions and constructions were limited by War Production regulation.

Work on the construction of Power Plant No. 3 was initiated during the past fiscal year.

A total of 83,151 acre-feet of water were drawn from the Guajataca Reservoir in order to meet the requirement for the production of electric energy. The run-off into the reservoir was 84,995 acre-feet, exceeding the draft by 1,844 acre-feet; but about 7,000 acre-feet had to be wasted during the floods of October and November, 1942, and it was necessary, therefore, to draw about 5,160 acre-feet from the storage available in the Reservoir at the beginning of the fiscal year under review to meet the generating demand.

Out of the total volume of water drawn from the reservoir only 2,245 acre-feet were delivered for irrigation purposes, under provisions of Law No. 178 of May 14, 1941, and 184.20 acre-feet were sold under direct orders with a cash value of \$426.05. Water delivered for municipal waterworks and for domestic and industrial purposes amounted to 3,180 acre-feet with a cash value of \$13,875.37.

WAR EMERGENCY PROGRAM

All activities of the War Emergency Program related with public works are being handled by this Department. Repairs to buildings, construction of streets, sewers, schools, bridle paths, roads, etc., brought an unusual amount of work to our reduced organization. There were employed, at the peak of activities, about 12,000 laborers on the basis of two days a week.

ACCOUNTS AND DISBURSEMENTS

This was a record year for the division. A total of \$6,927,690.47, was disbursed by vouchers and payrolls covering activities of the Department.

Important changes and promotions made in the personnel of the Department of the Interior, Fiscal Year 1942-43:

1. Mr. Luis A. Cuevas was promoted from Asst. Director, Disbursing Officer to Director, Division of Property, Accounts and Disbursements, March 1, 1943.

2. Mr. Salvador V. Caro, was promoted from Resident Engineer to Supervising Engineer, Division of Municipal Roads, April 1, 1943.

3. Mr. Julio García Valdediós was promoted from Chief Clerk to Accountant, Division of Municipal Roads, April 1, 1943.

4. Mr. Jacinto Urbino was transferred from the position of Associated Civil Engineer, Bureau of Public Works to Executive Director, Insular Sewerage Service Board, May 1, 1943.

5. Mr. Miguel A. Barasorda was appointed Asst. Director of Muñoz Rivera Park, Sept. 1, 1942.

6. Mr. Samuel Angelí Sánchez was promoted from Mech. Engineer, Bureau of Public Works to Asst. Director, Bureau of Automobile and Traffic, July 1, 1942.

7. Mr. Enrique Arana was promoted from General Inspector, to Civil Engineer Director, Division of Maintenance of Roads and Bridges, July 1, 1942.

Respectfully,

SERGIO CUEVAS,

Commissioner of the Interior.

DIVISION OF SURVEY AND DESIGN OF HIGHWAYS, ROADS & BRIDGES

The Division of Survey and Design of Highways, Roads and Bridges carried out its activities with greatly reduced personnel attending to urgent necessities created by the war emergency, which made imperative heavy survey and design work on road projects for immediate construction to aid in relieving unemployment caused by the reduction of local industrial activities in the Island.

SURVEY AND DESIGN

The work performed during the year may be summarized as follows:

The surveying parties engaged in road and highway location completed the survey of 68.72 kilometers of municipal roads and 20.59 kilometers of main highways. Topographical surveys and tests borings were made to obtain data for the design of structures and foundations on two bridge projects.

The following tables give a detailed information of the survey work performed during the year:

TABLE NO. 1
SURVEY OF INSULAR HIGHWAYS

Road No.	Section	Length Km.	Remarks
62.....	Guayama-Carite.....	2.38	By Pass connecting Insular Roads 1 and 47
1-5.....	Caguas "By Pass".....	1.89	
1-47.....	Cayey "By Pass".....	2.24	
2.....	Vega Alta "By Pass".....	1.80	Preliminary Survey
3.....	Arroyo "By Pass".....	1.58	
51.....	Ponce-Jayuya.....	1.10	
48.....	Aibonito-Cayey-Salinas.....	2.40	
15.....	Casablanca-Orocovis.....	7.20	
	Total.....	20.59	

TABLE NO. 2
SURVEY OF MUNICIPAL ROADS

Road	Municipality	Length Km.
Mavi.....	Río Grande.....	3.55
Coabey.....	Jayuya.....	2.20
Rancheras.....	Yauco.....	2.03
Palo Hincado.....	Barranquitas.....	2.00
Central.....	Maunabo.....	3.82
Pastos.....	Morovis.....	1.13
La Prieta.....	Comerio.....	2.73
Mariana.....	Humacao (Preliminary Survey).....	1.85
Llanos Puna.....	Cabo Rojo.....	3.01
Mamache.....	Humacao.....	2.70
Cercadillo.....	Cayey.....	3.15
Cupey Alto.....	Río Piedras.....	3.45
Boquillas.....	Manatí.....	8.00
Canovanillas.....	Carolina.....	1.40
Jobos.....	Isabela.....	3.83
Tea.....	Lajas.....	3.00
Indiera Alta.....	Maricao.....	2.67
La Jagua.....	Caguas.....	2.88
San Antonio.....	Caguas.....	3.59
Ceiba Sur.....	Juncos.....	2.07
Aceituna.....	Moca.....	1.24
Miraflores Arrozal.....	Arecibo.....	3.17
Maria Antonia.....	Guánica.....	2.00
Quebrada Arenas.....	Vega Baja.....	3.01
Río Grande.....	Morovis.....	0.24
Total.....		68.72

TABLE NO. 3
SURVEY OF GRADE CROSSING ELIMINATION PROJECTS

Road No.	Section	Location	Type	Length Km.	Remarks
2.....	Vega Alta-Vega Baja.....	Km. 41.2	Overpass	0.920	Relocation

BORINGS

In order to have a clear idea of the nature of the subsoil before making designs of foundation structures, it is indispensable to perform borings to determine the character of the foundation materials.

Table No. 4 shows the footage of borings performed during the year:

TABLE NO. 4
BORINGS

Stream	Project	Footage of Borings Performed
Santiago River.....	Naguabo-Juncos Road.....	198
Yagüez River.....	Balboa Bridge.....	169
Total.....		367

DESIGN

The Designing Section was actively engaged in the preparation of projects for the completion of the SAN JUAN-PUNTA BORINQUEN Highway and of the Secondary Road Projects scheduled for construction during the year.

Plans and specifications for projects on the SAN JUAN-PUNTA BORINQUEN Highway were redesigned to cooperate with the War Effort by reducing substantially the use of materials listed as critical.

The following tables contain a detailed information of the work accomplished during the year:

TABLE NO. 5
INSULAR HIGHWAYS PROJECTS PREPARED

Road No.	Project	Section or Municipality	Length Km.	Estimate
2 ...	SN FAGH 25A (2).....	Hatillo-Camuy.....	4.95	\$108,190
2 ...	SN FAP 8H (1).....	Santurce-Bayamón.....	0.45	28,000
62 ...	Guayama-Carite.....	Guayama.....	3.63	72,600
26 ...	Utuado-Florida.....	Utuado.....	2.01	45,000
2 ...	Vega Alta By Pass.....	Vega Alta-Vega Baja.....	0.77	13,860
48 ...	Aibonito-Cayey.....	Aibonito-Cayey-Salinas...	2.38	52,500
1-5-15 ...	Caguas By Pass.....	Caguas.....	1.49	45,000
33 ...	Hatillo-Bayaney.....	Hatillo.....	3.02	54,000
3 ...	Arroyo By Pass.....	Arroyo.....	1.89	52,000
57 ...	Improvement and Widening of Loíza Street.....	Santurce.....	2.83	75,200
2 ...	SN FAP 30B (1).....	Vega Alta-Vega Baja.....	2.39	165,980
2 ...	SN FAP 30A (1).....	Vega Alta-Vega Baja.....	2.60	227,040
28 ...	SN FAS 20A (1).....	Naguabo-Juncos.....	4.37	183,123
	Total.....		32.78	\$1,122,493

TABLE NO. 6
DESIGN OF GRADE CROSSING ELIMINATION PROJECTS

Road No.	Projects	Section	Length Km.	Estimate
2	SN FAGH 30 D (1).....	Vega Alta-Vega Baja.....	0.920	\$104,520

TABLE NO. 7
PROJECTS FOR MUNICIPAL ROADS

Road No.	Road	Municipality	Length Km.	Estimate
1.	Achiote.	Naranjito.	2.00	\$34,000.00
2.	Cortés.	Manatí.	3.56	56,960.00
3.	Guayabotas.	Yabucoa.	5.62	95,540.00
4.	Herrerías.	Las Marías.	2.82	45,120.00
5.	Jacabo.	Patillas.	2.02	30,300.00
6.	Tanamá.	Adjuntas.	2.00	32,000.00
7.	Barrazas.	Carolina.	2.00	34,000.00
8.	Espino.	Lares.	1.59	28,620.00
9.	Humata.	Añasco.	2.00	34,000.00
10.	Juan Martín.	Luquillo.	2.00	32,000.00
11.	Palos Blancos.	Corozal.	2.00	36,000.00
12.	Pulgullas-Asomante.	Coamo.	1.01	21,050.00
13.	Tibes.	Ponce.	2.00	32,090.00
14.	Quebradillas.	Barranquitas.	2.25	40,500.00
15.	Rabanal.	Cidra.	2.00	35,000.00
16.	Fozas.	Ciales.	2.05	39,900.00
17.	Coabey.	Jayuya.	2.07	37,290.00
18.	Perchas.	San Sebastián.	2.15	37,925.00
19.	Hato Nuevo.	Guaynabo.	1.69	31,265.00
20.	Mavi.	Río Grande.	3.36	59,472.00
21.	Rosario.	Mayagüez.	3.06	52,020.00
22.	Quebrada Inferno.	Trujillo Alto.	3.06	52,020.00
23.	Aguas Buenas-Cidra.	Aguas Buenas.	3.05	51,850.00
24.	Palo Hincado.	Barranquitas.	2.19	38,544.00
25.	Guilarte.	Adjuntas.	6.30	21,050.00
26.	Montones.	Las Piedras.	1.00	16,000.00
27.	Puertos.	Camuy.	2.00	26,000.00
28.	Cacao.	Orocovis.	2.10	37,800.00
29.	Cerro Gordo.	San Lorenzo.	4.27	76,860.00
30.	Cedro.	Cayey.	4.04	72,720.00
31.	Serrano.	Toa Alta.	4.24	76,300.00
32.	Pastos.	Morovis.	2.13	40,470.00
33.	Llanos Tuna.	Cabo Rojo.	3.01	51,000.00
34.	Maguayo.	Dorado.	2.60	41,600.00
35.	Cercadillo.	Cayey.	3.15	56,700.00
36.	La Prieta.	Comerio.	2.40	45,000.00
37.	Mambiche.	Humacao.	2.02	30,000.00
38.	Jobs.	Isabela.	3.83	61,280.00
39.	Teas.	Lajas.	3.00	47,000.00
40.	Muñoz Rivera.	Patillas.	6.18	111,240.00
41.	Tetuan.	Utua.	1.00	15,000.00
Total.			110.82	\$1,810,366.00

TABLE NO. 8
DESIGN OF BRIDGES

Road No.	Project	Stream	Span Length Meters	Estimate
2.	SN FAP 30 E (1).	Cibuco River.	65.75	\$129,000

TABLE NO. 9
ESTIMATED COST OF PROJECTS PREPARED BY THE DIVISION

Classification	Project	Length Km.	Estimate
Insular Highways.		32.78	\$1,122,493.00
Municipal Roads.		110.82	1,810,366.00
Grade Crossings.		0.92	104,520.00
Bridges.		0.83	129,000.00
Total.		145.35	\$3,166,379.00

EXPENDITURES

The total expenditures of the Division during this year were as follows:

Survey Section-----	\$67,667.62
Design Section-----	58,486.67
Equipment, materials and miscellaneous expenses	4,809.12
	<hr/>
Total Expenditures-----	\$130,963.41
	<hr/>

DIVISION OF CONSTRUCTION AND INSPECTION

I.—History of Federal Aid.

Federal aid for highways construction was extended to the Island of Puerto Rico in accordance with amendments to the Federal Highway Act of July 11, 1916, effective July 1, 1937.

The Island of Puerto Rico accepted the Federal aid amending the act levying the tax on gasoline apportioning the revenues from this source to meet the expenditures entailed in the proposed road construction program. This act is known as Gasoline Act No. 143 approved in May 15, 1937.

The first program of Highways Roads and Bridges submitted for approval to the Public Roads Administration included the following roads and bridges:

Martín Peña Channel Bridge.

Widening of Martín Peña—Río Piedras Road.

Jacaguas River Bridge.

Añasco River Bridge.

Grading and Asphalt Surfacing of Utuado—Jayuya Road.

Grading and Asphalt Surfacing of Añasco—San Sebastián Road.

Grading and Asphalt Surfacing of Orocovis—Coamo Road.

Grading and Asphalt Surfacing of San Lorenzo—Patillas Road.

Grading and Asphalt Surfacing of Miradero Secondary Road, Mayagüez.

Grading and Asphalt Surfacing of Carmen Secondary Road, Guayama.

Grading and Asphalt Surfacing of Aguas Buenas—Guaynabo Secondary Road.

Grading and Asphalt Surfacing of Candelaria Secondary Road, Vega Alta.

Grading and Asphalt Surfacing of Hatillo—Utuado Secondary Road.

Of this program, comprising sixteen projects of primary roads and five projects of secondary roads, only one has not been completed, the Añasco River Bridge.

The Grade Crossing Elimination program included the following projects:

Santurce—Bayamón Road.

Quebradillas—Isabela Road.

Isabela—Aguadilla Road.

Mayagüez—San Germán Road.

Barceloneta—Hatillo Road.

These were approved for construction as of October 14, 1937, and, on this date all of them have been completed.

The road improvement construction and grade crossing elimination programs with Federal Aid were modified and supplemented since 1938 to the extent that 86 projects were included, of which 43 of primary roads, 15 of feeder roads and 8 of grade crossing elimination were completed up to June 30, 1942 as set forth in the tables accompanying this report.

Early in 1943, the benefits of Section 4 of the Federal Highway Act of 1941, was extended to Puerto Rico, and this decision made eligible 12 projects of primary roads improvements which were under construction, for Federal Aid at the rate of 75 per cent instead of 50 per cent.

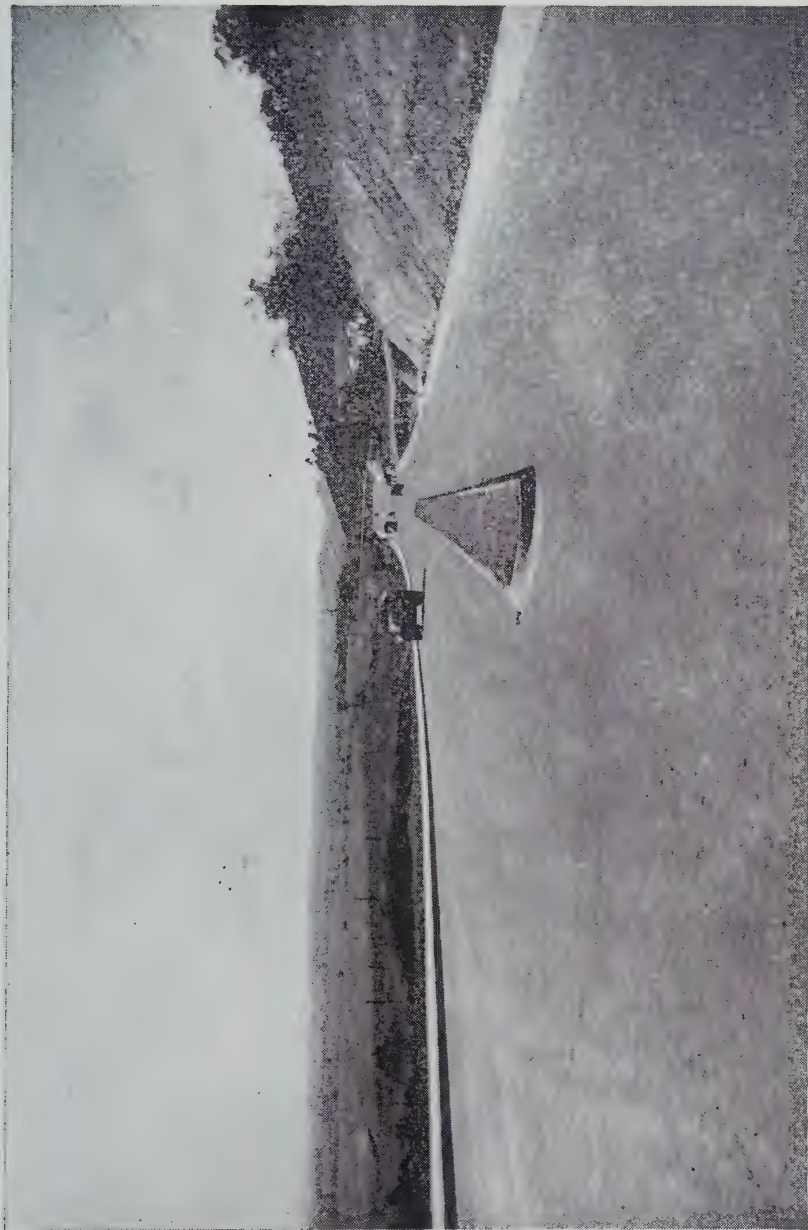
The amount of Federal Funds reapportioned to Puerto Rico under the amendment of Section 4 of the Federal Highway Act was \$461,305.57.

Road improvements during the fiscal year 1942-43 are fully explained in the table under the caption "Projects under construction" which is included as an exhibit of this report.

Federal Aid apportionments since 1938 are listed below:

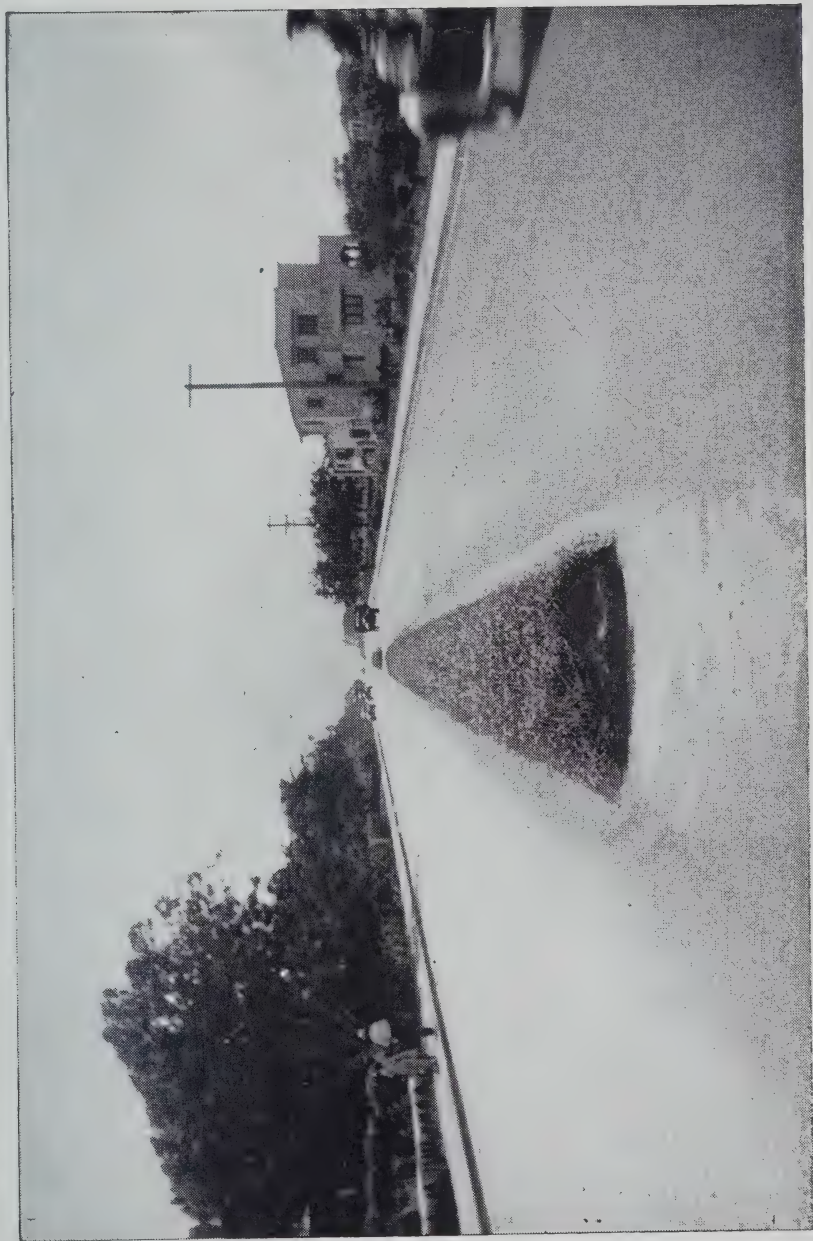
FOR SECONDARY ROADS	
1938 -----	\$125,000.00
1939 -----	121,875.00
1940 -----	73,125.00
1941 -----	73,125.00
1942 -----	86,731.00
Reapportionments -----	554.00
1943 -----	86,352.00
Total -----	\$566,762.00

FOR PRIMARY ROADS	
1938 -----	\$625,000.00
1939 -----	609,375.00
1940 -----	487,500.00
1941 -----	560,625.00
1942 -----	495,603.00
Reapportionments -----	4,515.00
1943 -----	493,438.00
Total -----	\$3,276,056.00



WIDENING AND RELOCATION OF ROAD No. 2, SANTURCE-BAYAMON SECTION,
NEAR THE DISTRICT HOSPITAL.

Constructed by Force Account With Combined Insular and W.P.A. Funds.—Completed, November, 1943.
Sergio Cuevas Bustamante, Commissioner of the Interior.



WIDENING AND RELOCATION OF ROAD No. 2, SANTURCE-BAYAMON SECTION, IN THE VICINITY OF CAPARRA SUBURBAN DEVELOPMENT.

Constructed by Force Account With Combined Insular and W.P.A. Funds.—Completed, November, 1943.
Sergio Cuevas Bustamante, Commissioner of the Interior.

FOR GRADE CROSSINGS

1938 -----	\$369,959.00
1939 -----	360,341.00
1940 -----	150,076.00
1941 -----	224,207.00
1942 -----	166,250.00
Reapportionments -----	1,942.00
1943 -----	165,506.00
<hr/>	
Total -----	\$1,438,281.00
<hr/>	
Total Federal Aid Funds -----	\$5,281,099.00
<hr/>	

The Insular Government matched and obligated Federal Funds as follows:

To JUNE 30, 1942

Feeder Roads -----	\$336,496.28
Primary Roads -----	3,276,056.00
Grade Crossings -----	1,157,095.54
<hr/>	
Total -----	\$4,769,647.82

UNOBLIGATED FEDERAL FUNDS

Feeder Roads -----	\$230,265.72
Primary Roads -----	-----
Grade Crossings -----	281,185.46
<hr/>	
Total -----	\$511,451.18 \$5,281,099.00
<hr/>	

The Federal reimbursements received up to June 30, 1942 were:

For Primary Roads -----	\$1,617,050.60
For Feeder Roads -----	328,341.93
For Grade Crossings -----	652,107.77
<hr/>	
Total -----	\$2,597,500.30
<hr/>	

The expenditures of the Insular Government during the same period:

For Primary Roads -----	\$2,254,850.92
For Feeder Roads -----	460,199.52
For Grade Crossings -----	177,561.10
<hr/>	
Total -----	\$2,892,611.54
<hr/>	

Reimbursements in transit and value of completed projects pending liquidation (Probable Federal Share) \$202,283.46.

During the fiscal year 1942-43, expenditures on contracts pending liquidation and under construction were as follows:

Federal Funds obligated:

Primary Roads-----	\$1,589,605.64
Grade Crossings-----	380,258.42
Total -----	<u>\$1,969,864.06</u>

Reimbursements:

Primary Roads-----	\$711,669.00
Grade Crossings-----	253,792.16
	<u>\$965,460.16</u>

Balance of Federal Aid to Cover Work in Progress-- \$1,004,403.90

Funds set aside by the Insular Government:

Primary Roads-----	\$1,824,971.19
Grade Crossings-----	207,490.00
Total -----	<u>\$2,032,461.19</u>

Expenditure incurred and paid for work performed, including inspection and Rights of Way:

Primary Roads-----	\$1,504,418.00
Grade Crossings-----	99,582.64
	<u>\$1,604,000.64</u>

Balance of Insular Funds Matched to Cover Work
in Progress----- \$428,460.55

WORK PERFORMED DURING THE FISCAL YEAR ENDING JUNE 30, 1943
PROJECTS CONSTRUCTED UNDER CONTRACT

Out of the twenty contracts standing during the year, ten were completed and the remainder ten are at present under construction. Two of the latter projects, are being completed by force account and a third one, the Añasco River Bridge, was stopped by Court Action.

Delays in construction of projects were mainly due to the difficulty in obtaining materials, fuel, equipments and repair parts due to the present national emergency.

Detail information regarding these contracts follows:



THOROUGH CUT ON RELOCATION TO INJULAR ROAD No. 2, "ESPINOSA HILL".
YEAR 1943.

KM. 27.1

Contractor: Arturo Rivera. Sergio Cuevas Bustamante, Commissioner of the Interior.



RIO GRANDE DE LOIZA BRIDGE.—ROAD NO. 23.—RIO PIEDRAS-TRUJILLO ALTO SECTION.
COMPLETED, FEBRUARY 21, 1941.

José E. Colom, Commissioner of the Interior.

Robert R. Prann, Contractor.

FEDERAL AID PROJECTS

SN FAP 27-A (1) "La Plata" river bridge.

Contractor: Raul Gayá Benejam.

Contract price \$255,075.50—Increased to-----	\$282,539.00
Paid to contractor up to June 30, 1943-----	213,502.27
Amount of work pending-----	62,877.73
Materials on site-----	18,198.07
Paid for indemnities-----	3,796.00

This contract expired on November 20, 1942, was extend to April 10, 1943, and because of changes introduced to the project due to difficulties in obtaining critical materials, work is still under way. Increases in cost due to changes in design to economize critical materials.

FAP 3-A (1) "Añasco" river bridge and approaches.

Contractor: Tomás Carro.

Contract price-----	\$197,362.25
Paid to contractor up to January 11, 1943-----	158,539.89
Amount of work pending-----	38,822.36
Paid for indemnities-----	0.00

Contract expired on August 9, 1942.

Extended to October 18, 1942 and to January 7, 1943.

On January 14, 1943, the Superintendent of Public Works notified the contractor that because of his failure to complete his contract in time as extended, the Commissioner of the Interior would take charge of the work and finish it by force account as per Art. 7 of the contract. The contractor took the matter to Court, where decision is still pending. A restraining order against the Commissioner was issued.

SN FAP 8-F (1) "Bayamón" river bridge.

Contractor: Vicente Quilichini.

Contract price—\$182,370.65—Reduced to-----	\$151,777.65
Paid to contractor up to May 13, 1943-----	72,789.51
Amount of work pending-----	78,988.14
Paid for indemnities-----	0.00

Contract expired on July 17, 1942.

Extended to September 29, 1942, March 31, 1943 and June 30, 1943.

Delays in the work due to difficulty in obtaining delivery of structural steel.

SN FAP 8-G (1) Hondo river bridge.

Contractor: San Miguel, González y Valiente & Co.

Contract price-----	\$86,504.00
Total cost of work-----	82,496.24
Paid for indemnities-----	680.00

This project was finally accepted on April 29, 1943.

FAGH 25-A (1) Hatillo-Quebradillas road 4.9816 kilometers (Elimination of railroad grade crossing).

Contractor: Julio Nigaglioni.

Contract price \$118,800.50—Increased to_____ \$139,888.97

Paid for indemnities_____ 13,343.00

This project was finally accepted and liquidated on February 2, 1943.

FAP 9-C (1) Barceloneta-Hatillo road 1.086 kilometers.

Contractor: Juan E. Casanova.

Contract price \$96,349.55—Increased to_____ \$103,517.33

Paid for indemnities_____ 8,933.90

This project was finally accepted and liquidated on February 7, 1943.

SN FAP 8-D (1) Santurce-Bayamón road 3.43 kilometers.

Contractor: Manuel Acevedo Rosario.

Contract price \$175,556.20—Increased to_____ \$197,827.92

Paid to contractor up to January 31, 1942_____ 150,623.08

Contract rescinded by mutual consent on March 1942 and the work completed by the Insular Department of the Interior by force account.

Total cost of project_____ \$373,384.12

Paid for indemnities_____ 27,464.84

Increase due to changes made to improve project.

FAP 8-D (2) Santurce-Bayamón (Piedras river bridge).

All bids for the construction of this project were rejected and the work performed by the Insular Department of the Interior by force account.

Total cost of project_____ \$75,705.32

Paid for indemnities_____ 5,006.40

“PROJECTS FINANCED WITH INSULAR FUNDS”

Garrochales Secondary Road—3.100 kilometers.

Municipality of Barceloneta.

Contractor: Candelario Vera.

Contract price \$21,651.70—Reduced to_____ \$16,809.12

Paid for indemnities_____ 830.75

This project was finally accepted and liquidated on February 28, 1943.

Leguísamo Secondary Road—3.600 kilometers.

Municipality of Mayagüez.

Contractor: José Pereyó.

Contract price \$22,518—Increased to_____ \$26,736.77

Paid for indemnities_____ 515.50

This project was finally accepted and liquiated on September 30, 1942.

Carrizal secondary road—5.41884 kilometers.

Municipality of Aguada.

Contractor: Caribbean Engineering Company.

Contract price \$53,512.50—Increased _____ \$53,723.59

Paid to contractor up to February 26, 1943_____ 38,968.32

Amount of work pending_____ 14,755.18

Paid for indemnities_____ 6,836.10

This contract was rescinded by mutual consent on February 26, 1943. This project is being completed by the Insular Department of the Interior by force account.

“PROJECTS UNDER CONSTRUCTION BY THE WORKS PROJECTS
ADMINISTRATION ON INSULAR HIGHWAY No. 2”

The Works Projects Administration undertook the construction of 88.85 kilometers of the Insular Highway No. 2 with the sponsorship of this Department, of which 59.73 kilometers have been completed up to June 30, 1943.

The cost of this road program to this date is as follows:

Up to June 30, 1942:

W.P.A. Funds_____ \$2,709,929.28

Sponsor's Funds_____ 384,613.95

_____ \$3,094,543.23

During the present fiscal year:

W.P.A. Funds_____ \$2,719,303.01

Sponsor's Funds _____ 609,766.16

_____ 3,329,069.17

Total Expenditures_____ \$6,423,612.40

The total funds expended by the Works Projects Administration total \$5,429,252.29 and the cost of the sponsor amounts to \$994,380.11. This gives a ratio of 5.45 to 1 with reference to apportionments of each agency.

The Insular Government has derived great benefits from the help offered by the Works Projects Administration as seen by this statement. The road improvements program under construction without the aid of this Federal Agency could not have been successfully accomplished by the Insular Government alone due to lack of funds.

FAP 8 Sec. 1-A, Sec. 1-B, and 8 Sec. II—Santurce-Bayamón Road.

At present, these three projects are practically completed, specially the first two; on the third project about 75 per cent of the total amount of work has been completed.

PAID FOR MATERIALS AND INSPECTION

From beginning of project to June 30, 1942-----	\$184,855.11
During present fiscal year-----	57,432.68
<hr/>	
Total -----	\$242,287.79
Paid for indemnities -----	\$154,130.51

FAP 9 Sec. I—Barceloneta-Hatillo Road.

Work on this project is progressing satisfactorily, and at the end of the year the work done is about 80 per cent of the total amount.

PAID FOR MATERIALS AND INSPECTION

From beginning of project to June 30, 1942-----	\$34,490.40
During present fiscal year-----	15,603.33
<hr/>	
Total -----	\$50,093.73
Paid for indemnities -----	\$58,976.60

FAP 9 Sec. II—Barceloneta-Hatillo Road.

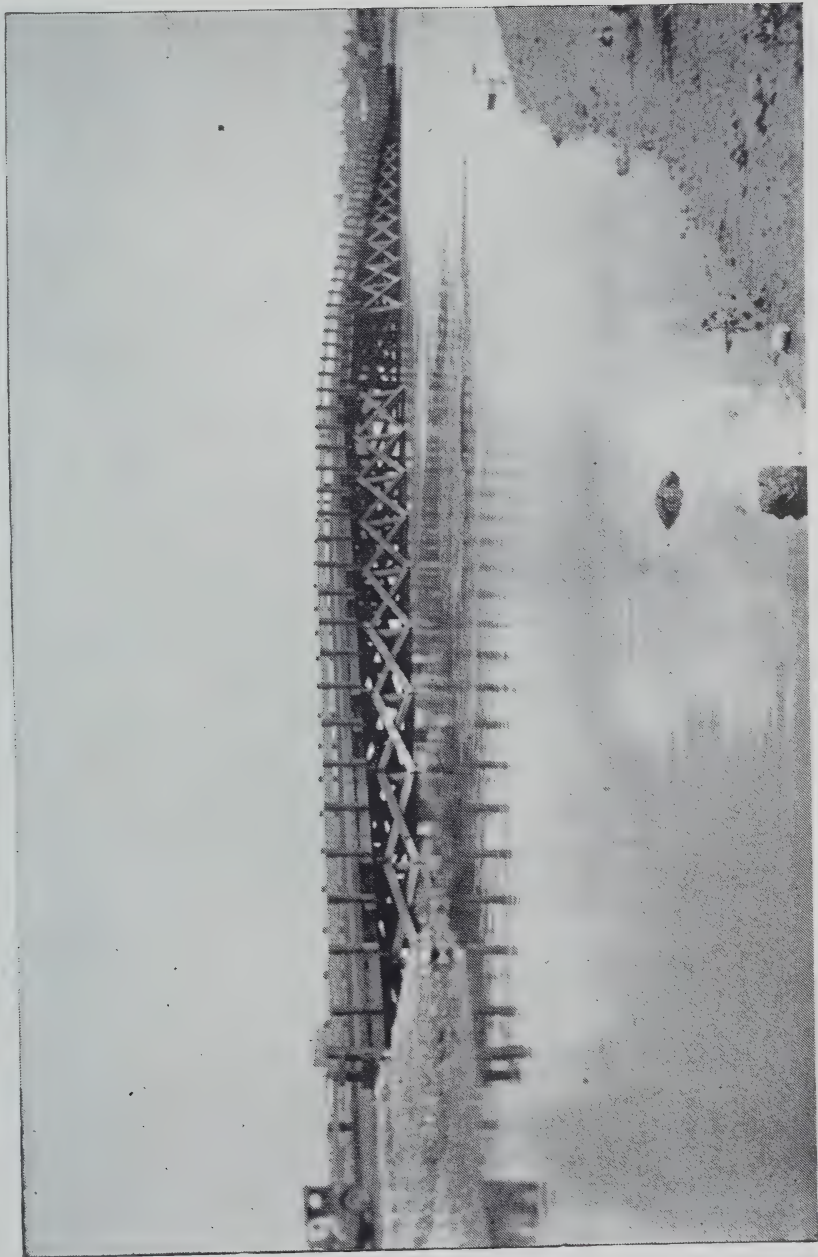
Work on this project is practically complete. There are a few minor details pending completion.

PAID FOR MATERIALS AND INSPECTION

From beginning of project to June 30, 1942-----	\$94,298.06
During present fiscal year-----	10,877.02
<hr/>	
Total -----	\$105,175.08
Paid for indemnities -----	\$22,971.36

FAP 11 Sec. I and Sec. II—Quebradillas-Isabela.

The first of these two projects is now complete, and the second one is nearing completion.



TEMPORARY TIMBER BRIDGE ACROSS MARTIN PEÑA CHANNEL ON INSULAR ROAD No. 2
YEAR, 1943
KM. 1.65
Sergio Cuevas Bustamante, Commissioner of the Interior.

PAID FOR MATERIALS AND INSPECTION

From beginning of project to June 30, 1942-----	\$27,496.17
During present fiscal year-----	16,373.95
Total -----	\$43,870.12
Paid for indemnities-----	\$61,133.41

FAP 25 Sec. I—Hatillo-Quebradillas Road.

Up to December 1942 the progress of the work on this section was very poor, but during the latter part of the year construction operations were so developed that it is expected that this project will be completed within 5 or 6 months.

PAID FOR MATERIALS AND INSPECTION

From beginning of project to June 30, 1942-----	\$10,700.00
During present fiscal year-----	20,566.83
Total-----	\$31,266.83
Paid for indemnities-----	\$29,031.66

FAP 27 Sec. I, Sec. II and Sec. III—Bayamón-Vega Alta Road.

On December 1942, all these three sections had been completed.

PAID FOR MATERIALS AND INSPECTION

From beginning of project to June 30, 1942-----	\$12,108.50
During present fiscal year-----	15,932.66
Total-----	\$28,041.16
Paid for indemnities-----	\$60,343.52

FAP 30 Sec. I, Sec. II, Sec. III and Sec. IV—Vega Alta-Barceloneta Road.

Section I, II and IV are now finished. On Sec. III, there are only a few minor details pending construction, so, practically all four sections may be considered as completed.

PAID FOR MATERIALS AND INSPECTION

From beginning of project to June 30, 1942-----	\$20,665.71
During present fiscal year-----	14,737.53
Total-----	\$35,403.24
Paid for indemnities-----	\$71,655.08

MUNICIPAL OR SECONDARY ROADS UNDER CONSTRUCTION BY WORK
PROJECTS ADMINISTRATION FINANCED WITH INSULAR
AND FEDERAL FUNDS

The following projects which are being constructed by the Work Projects Administration and to which the Insular Department of the Interior contributes with inspection, indemnities and part of the materials required are progressing satisfactorily in spite of the emergency.

Rancheras Road—Municipality of Yauco.

Paid for materials and inspection-----	\$2, 672. 79
Paid for indemnities -----	590. 10
<hr/>	
Total -----	\$3, 262. 89

Palo Hincado Road—Municipality of Barranquitas.

Paid for materials and inspection-----	\$4, 038. 35
Paid for indemnities -----	600. 00
<hr/>	
Total -----	\$4, 638. 35

Central Road—Municipality of Maunabo.

Paid for materials and inspection-----	\$5, 667. 87
Paid for indemnities -----	0. 00
<hr/>	
Total -----	\$5, 667. 87

Hato Nuevo Road—Municipality of Guaynabo.

Paid for materials and inspection-----	\$7, 171. 58
Paid for indemnities -----	294. 25
<hr/>	
Total -----	\$7, 465. 83

Tallaboa Road—Municipality of Peñuelas.

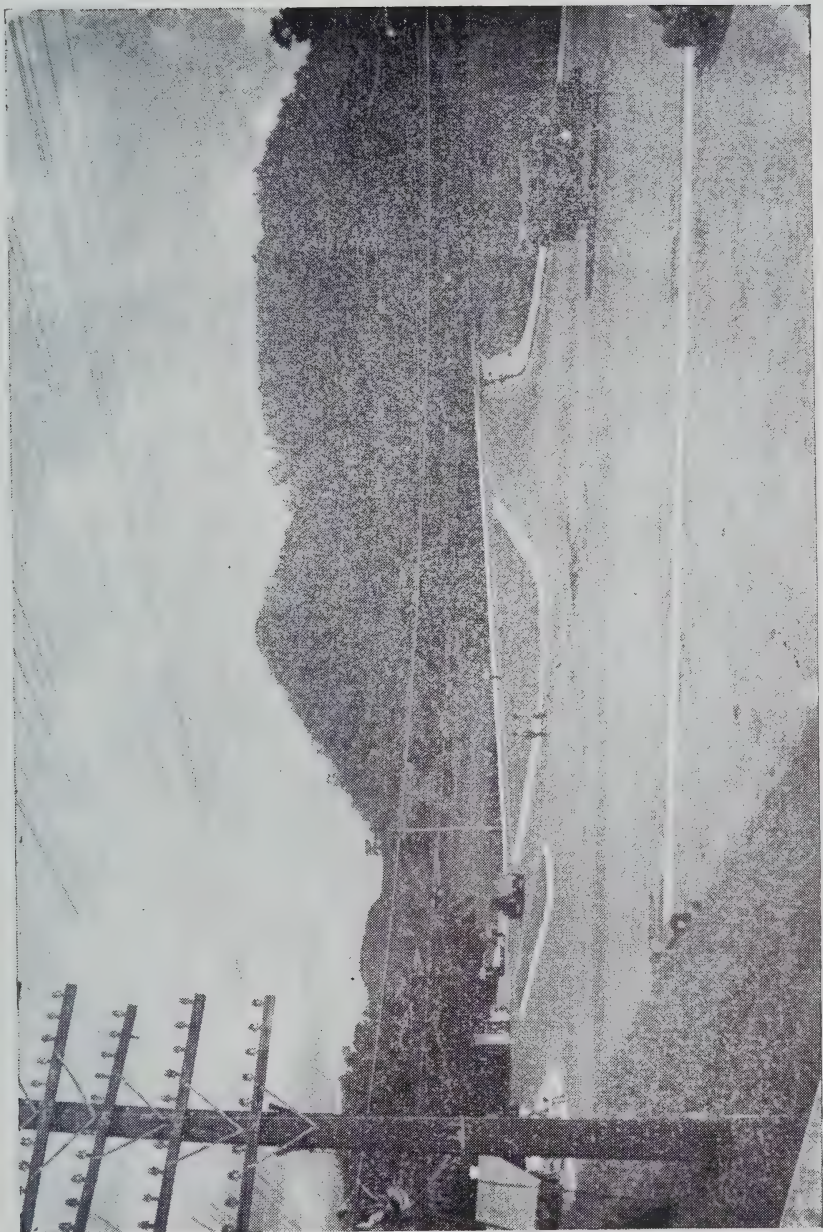
Paid for materials and inspection-----	\$3, 224. 51
Paid for indemnities -----	25. 00
<hr/>	
Total -----	\$3, 269. 51

Mabi Road—Municipality of Río Grande.

Paid for materials and inspection-----	\$1, 100. 07
Paid for indemnities -----	386. 45
<hr/>	
Total -----	\$1, 486. 52

Espino Road—Municipality of Lares.

Paid for materials and inspection-----	\$1, 100. 07
Paid for indemnities -----	386. 45
<hr/>	
Total -----	\$1, 486. 52



JUNCTION OF INSULAR ROAD No. 2 AND INSULAR ROAD No. 25 TO CATAÑO.
KM. 5.4
YEAR 1943

Sergio Cuevas Bustamante, Commissioner of the Interior.

FAP 8-H—Municipality of San Juan.	
Paid for materials and inspection-----	\$2,791.25
<i>Caguas by pass</i> (Pending construction).	
Paid for surveys-----	\$1,921.66
Paid for indemnities-----	6,070.00
Total-----	\$7,991.66
<i>Arroyo by pass</i> (Pending construction).	
Paid for surveys-----	\$659.36
<i>Guajataca Road</i> —Municipality of Quebradillas.	
Paid for materials and inspection-----	\$1,514.46
<i>Minillas Road</i> —Municipality of Bayamón.	
Paid for materials and inspection-----	\$5,438.64
<i>Pasto Road</i> —Municipality of Morovis.	
Paid for materials and inspection-----	\$1,304.62
Paid for indemnities-----	311.00
Total-----	\$1,615.62
<i>Rucio Road</i> —Municipality of Peñuelas.	
Paid for materials and inspection-----	\$4,343.90
Paid for indemnities-----	30.00
Total-----	\$4,373.90
<i>Sierra Baja Road</i> —Municipality of Guayanilla.	
Paid for materials and inspection-----	\$2,095.44
Paid for indemnities-----	25.00
Total-----	\$2,120.44

MUNICIPAL OR SECONDARY ROADS UNDER CONSTRUCTION BY FORCE
ACCOUNT FINANCED ENTIRELY WITH INSULAR FUNDS

The construction of 24 secondary roads under Municipal Road Program No. 1, began in November 1942. At the end of the year, the work on Casey Arriba Road at Añaseo and that on Naranjo Road at Aguada had been completed.

Because of lack of funds, construction operations were discontinued on the following projects:

- | | |
|------------------|--------------------|
| 1. Rabanal. | 8. Quebradillas |
| 2. Caonillas | 9. Juan Martín |
| 3. Rosario | 10. Coabey |
| 4. Pozas | 11. Tibes |
| 5. Higuillales | 12. Sabana Grande |
| 6. Pulguillas | 13. Utuado-Florida |
| 7. Palos Blancos | 14. Carite |

It is to be regreted that the construction of some others of these roads will have to be discontinued as soon as their corresponding appropriation become exhausted. The aggregate total length of road already constructed is 38 kilometers.

On March 1943, the construction of eight secondary roads under Municipal Road Program No. 2, was started. Work on Indiera Alta Road at Maricao and Cacao Road at Orocovis which were also included in this plan have not yet began.

The total length of road built under this plan was four kilometers.

Details of appropriations available, amount paid and length of road assigned and constructed is detailed in the graphic accompanying this report.

FISCAL YE.

Amount Reimbursed
\$75,537.00
49,742.00
52,534.00
47,593.00
8,958.00
73,191.00
25,425.16
40,129.00
26,632.00
106,430.00
67,853.00
80,745.00
50,780.00
115,047.00
44,297.00
72,751.00
27,816.00
.....
.....
.....
.....
\$965,460.16

PROJECTS UNDER CONSTRUCTION BY CONTRACT DURING FISCAL YEAR 1942-1943

Project	Date of Contract	Contract Price	Increases	Deductions	Total Contract Price	Paid to Contractor	Value of Pending Work	Federal Participation	Amount Reimbursed	Balance Pending	Cost of Right of Way	INSPECTION CHARGES			REMARKS
												During 1942-1943	During Previous Years	Total	
FAP 27A (1)-La Plata River Bridge CONTRACTOR: Bayamon-Vega Alta Road Rafel Gayá Boujeam	Oct. 7, 1941	\$20,471.50	\$7,405.00		\$27,876.50	\$20,471.50	\$62,877.75	\$266,927.00 (75%)	\$70,587.00	\$181,298.20	\$3,796.00	\$7,737.93	\$8,985.94	\$11,723.87	Increase due to change in design of foundation because materials such as steel piles could not be procured
FAP 3A (1)-Anasco River Bridge CONTRACTOR: Mayaguez-Rincón Road Tomás Carro	July 25, 1940	197,362.25			197,362.25	108,839.89	38,822.86	108,135.00 (50%)	49,742.00	58,293.00		2,851.23	17,176.64	20,027.87	At present this contract is under judicial contest and the construction is suspended.
FAP 8F (1)-Bayamón River Bridge CONTRACTOR: Santurce-Bayamón Road Vicente Quilinchini	Sept. 13, 1941	182,370.65		\$30,593.00	151,777.65	72,789.51	78,988.14	150,097.50 (75%)	52,534.00	97,563.50		4,413.57	7,632.53	12,046.10	Underruns due to change in design of foundation of abutments and piers.
FAP 8G (1)-Hondo River Bridge CONTRACTOR: Santurce-Bayamón Road San Miguel, González and Valiente & Co.	March 17, 1942	86,504.00		4,007.76	82,496.24	82,496.24		71,035.50 (75%)	47,593.00	23,442.50	680.00	3,115.13	1,898.07	5,013.20	Finished and liquidated on April 29, 1943.
FAP 8E (1)-Timber Trestle Bridge CONTRACTOR: Santurce-Bayamón Road Robert R. Prann	March 2, 1942	34,332.00	3,883.20		38,215.20	38,215.20		25,441.35	8,958.00	16,483.35		6,202.20	2,571.12	8,773.32	Liquidated on March 18, 1943 and work continued by the 10th District Naval.
FAGH 3B (1)-Over Pass CONTRACTOR: Mayaguez-Rincón Road Adolfo Mussenden	May 1, 1941	107,519.50	228.62		108,048.12	88,757.74	19,290.38	118,050.00 (100%)	73,191.00	44,859.00	680.00	3,100.00	5,161.66	8,261.66	From January 1943 the continuance of work is taking place by force account.
FAGH 11G (1)-Over Pass CONTRACTOR: Quebradillas-Isabela Road Valiente & Co.	Dec. 24, 1941	26,528.25		1,210.07	25,318.18	25,318.18		25,425.16 (100%)	25,425.16			1,785.33	2,690.88	4,476.21	Finished and liquidated on February 28, 1943.
FAGH 11C (1)-Over Pass CONTRACTOR: Quebradillas-Isabela Road Genaro J. del Valle	Dec. 24, 1941	102,026.00		10,001.20	91,424.80	65,620.97	25,803.83	111,470.00 (100%)	40,129.00	71,341.00	376.40	2,132.41	1,582.85	3,714.26	Underruns due to relocation.
FAP 11B (1)-Quebradillas-Isabela Road CONTRACTOR: Genaro J. del Valle	Dec. 24, 1941	115,913.80	26,899.62		142,813.42	67,717.01	75,096.41	95,115.00 (75%)	26,632.00	68,483.00	551.00	2,132.42	1,582.87	3,715.29	Overruns due to change in concrete items and to use greater amount of fill material.
FAP 27B (1)-Bayamón-Vega Alta Road CONTRACTOR: Arturo Rivera Gómez	Jan. 15, 1942	183,200.50	13,796.45		196,996.95	193,052.02	3,944.93	149,902.50 (75%)	106,430.00	43,472.50	10,257.80	7,906.90	4,785.66	12,692.56	Finished but not yet liquidated. Overruns due to change in structures and increase in overhaul.
FAP 27C (1)-Bayamón-Vega Alta Road CONTRACTOR: Gabriel Rexach Gómez	April 7, 1942	164,731.50	27,098.10		221,819.60	196,005.14	25,814.46	157,799.04 (75%)	67,853.00	89,946.04	37,263.16	6,613.88	2,559.33	9,173.21	Overruns due to change in the original section of the road.
FAP 28A (1)-Road and Bridge CONTRACTOR: Río Piedras-La Muda Road Adolfo Mussenden	Sept. 12, 1941	196,516.50	14,517.71		211,034.21	158,468.49	52,565.72	155,280.00 (75%)	80,745.00	74,535.00	56,762.89	9,019.99	9,298.58	18,318.57	Overruns due to change of grade and in the design of the bridge.
FAP 11D (1)-Quebradillas-Isabela Road CONTRACTOR: Enrique Báez	April 10, 1942	229,804.00		6,210.00	223,594.00	134,690.52	88,903.48	188,076.90 (75%)	50,780.00	137,296.90	10,666.12	6,890.45	1,342.95	8,233.40	Underruns due to reduction in width of pavement and elimination of part of the steel reinforcement.
FAGH 25A (1)-Haitillo-Quebradillas Road CONTRACTOR: Julio Nigaglioni	May 13, 1941	118,800.50	21,098.47		139,888.97	139,888.97		125,313.26 (100%)	115,047.00	10,266.26	13,343.00	3,2,4,03	12,891.95	16,175.98	Finished and liquidated on February 2, 1943. Overruns due to increase in overhaul because of difficulties in obtaining I beams.
FAP 9C (1)-Arecibo By Pass CONTRACTOR: Barceloneta-Haitillo Road Juan E. Casanova	June 12, 1941	96,349.55	7,167.78		103,517.33	103,517.33		79,102.50 (75%)	44,297.00	34,805.50	8,933.90	1,862.83	9,218.90	11,081.73	Finished and liquidated on February 7, 1943. Overruns due to force account work.
FAP 8D (1)-Santurce-Bayamón Road CONTRACTOR: Manuel Acevedo	March 17, 1941	175,556.20	197,827.92		373,384.12	373,384.12		162,657.29 (75%)	72,751.00	89,906.29	27,464.84	29,604.48	11,613.21	41,217.69	Contract rescinded and liquidated on March 1942. Work continued by force account, finishing April 1943. Increase due to local condition of muddy foundation requiring an amount of fill far in excess than that previously estimated.
FAP 8D (2)-Piedras River Bridge BIDDER: Santurce-Bayamón Road Gabriel Rexach	Bids opened Jan. 22, 1942	51,516.35	24,188.97		75,705.32	75,705.32		37,135.56 (75%)	27,816.00	9,319.56	5,006.40	11,394.45		11,394.45	After bid was awarded it was annulled by mutual consent and the construction performed by force account. Increase due to additional work in order to improve design.
Garrochales Secondary Road CONTRACTOR: Barceloneta Candelario Vera	Nov. 10, 1941	21,651.70		4,842.58	16,809.15	16,809.12					830.75	1,479.16	3,423.06	4,902.22	Finished and liquidated on February 28, 1943.
Leguismo Secondary Road CONTRACTOR: Mayaguez José Pereyó	April 30, 1941	22,518.00	4,218.77		26,736.77	26,736.77					515.50	1,440.99	11,245.86	12,686.85	Finished and liquidated on September 30, 1942.
Carrazal Secondary Road CONTRACTOR: Aguada Caribbean Engineering Co.	April 17, 1942	53,512.50	211.00		53,723.50	58,968.32	14,755.18				6,836.10	4,718.36	1,888.73	6,607.09	Liquidated on February 26, 1943 and work continued by force account.
		\$2,452,089.25	\$368,580.11	\$57,464.61	\$2,763,204.75	\$2,270,183.13	\$493,021.62	\$1,969,864.00	\$965,460.16	\$1,004,403.90	\$183,933.86	\$117,685.74	\$112,550.79	\$230,236.53	

EDERA

al Cost

55,536.71
91,855.80
98,482.79
60,257.11
40,871.94
23,496.24
73,891.58
71,780.69
52,913.89
61,998.26
28,046.56
18,534.21
25,600.06
42,437.44
23,364.86
47,257.45
7,212.04
27,643.21
08,857.17
44,719.25
44,005.20
30,588.59
10,042.57
69,909.53
58,494.58
15,862.00
23,465.77
11,080.95
18,700.52
14,668.80
57,077.03
90,087.73
42,484.68
72,900.02
19,955.87
95,806.82
14,661.05
85,406.67
72,302.90
19,833.11
46,202.46
15,650.95
37,956.40

\$71,901.52

TABLE SHOWING HIGHWAYS AND BRIDGES CONSTRUCTED WITH FEDERAL AID SINCE 1937

Year	Name of Project	Date of Construction	Beginning of Month	Estimated Cost	Actual Cost	Reconstruction	Paid to Contractor	Inspection	Right of Way	Total Cost	Federal Aid	Insular Aid	Contractor	Date of Completion	Kind of Project	Length
1937	FAP 1A (1) Luján-Jayuya Road	Jan 10	Jan 10	1,000.00	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	R. Rodríguez López	April 10, 1939	Highway	6.801 Kms
	FAP 1B (1) Jayuya-Caguas Road	Jan 10	Jan 10	1,000.00	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	R. Rodríguez López	Oct. 2, 1939	Highway	6.254 Kms
	FAP 1C (1) Aguas Buenas-Jayuya Road	Jan 10	Jan 10	1,000.00	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	R. Rodríguez López	May 19, 1939	Highway	2.276 Kms
	FAP 1D (1) Aguas Buenas-Jayuya Road	Jan 10	Jan 10	1,000.00	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	R. Rodríguez López	Nov. 1, 1938	Highway	3.374 Kms
	FAP 1E (1) San Lorenzo-Pedro River Road	Jan 10	Jan 10	1,000.00	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	R. Rodríguez López	Jan. 14, 1939	Highway	3.745 Kms
	FAP 1F (1) San Lorenzo-Pedro River Road	Jan 10	Jan 10	1,000.00	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	R. Rodríguez López	July 15, 1939	Highway	4.597 Kms
	FAP 1G (1) San Lorenzo-Pedro River Road	Jan 10	Jan 10	1,000.00	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	R. Rodríguez López	March 30, 1939	Highway	1.933 Kms
	FAP 1H (1) San Lorenzo-Pedro River Road	Jan 10	Jan 10	1,000.00	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	R. Rodríguez López	March 7, 1939	Highway	3.235 Kms
1938	FAP 2A (1) Jacaguas River Bridge	June 17	June 22	48,469.80	3,903.59		200,172.84	200,172.84	8,761.87	208,934.71	208,934.71	208,934.71	Rodríguez López	Sept. 30, 1939	Bridge	0.413 Kms
	FAP 2B (1) Jacaguas River Bridge	June 17	June 22	48,469.80	3,903.59		200,172.84	200,172.84	8,761.87	208,934.71	208,934.71	208,934.71	Rodríguez López	Sept. 22, 1939	Bridge	0.402 Kms
	FAP 2C (1) Jacaguas River Bridge	June 17	June 22	48,469.80	3,903.59		200,172.84	200,172.84	8,761.87	208,934.71	208,934.71	208,934.71	Rodríguez López	Oct. 6, 1939	Landscaping	3.00 Kms
	FAP 2D (1) Orocovis-Coamo Road	Oct 27	Nov. 3	15,150.00	545.75		15,695.75	2,838.46		18,534.21	8,250.00	10,284.21	Gabriel Rexach	June 11, 1939	Landscaping	1.497 Kms
	FAP 2E (1) Utuado-Jayuya Road	Nov 8	Nov 18	19,892.10	1,456.15		21,348.05	4,251.41		25,600.06	10,555.00	14,045.06	José Pereyó	Oct. 16, 1939	Landscaping	2.294 Kms
1939	FAP 2F (1) Patillas-San Lorenzo Road	Jan 3	Jan 16	172,822.50	25,738.68		198,561.18	24,398.97	434.71	223,960.15	93,980.00	129,980.15	Tomás Carro	July 21, 1941	Highway	7.229 Kms
	FAP 15A (1) Adjuntas-Pedro River Road	Jan 30	Feb 9	186,139.00	34,195.30		220,334.30	22,508.75	4,414.40	247,257.45	101,475.00	145,782.45	Genaro J. del Valle	June 18, 1942	Highway	5.698 Kms
	FAP 11A (2) Quebradillas-Isabela Road	March 28	April 5	5,877.50	40.70		5,918.20	1,253.84	40.00	7,212.04	3,150.00	4,062.04	Juan E. Casanova	June 17, 1940	Landscaping	0.373 Kms
	FAP 7F (1) Orocovis-Coamo Road	Feb 14	Feb 23	10,860.76	14,640.04		95,500.80	12,731.37	625.00	108,857.17	43,930.00	64,927.17	Colón, Gerardo y Vechini	Nov. 27, 1940	Highway	3.581 Kms
	FAP 5C (1) San Sebastián-Añasco Road	Jan 18	March 28	52,132.00			37,004.78	7,201.47	510.00	44,719.25	20,596.00	24,123.25	Hiram Forestier (1)	June 23, 1940	Highway	2.65 Kms
	FAP 20A (1) Juncos River Bridge	March 20	March 29	40,308.50	91.10		40,399.60	3,305.60	300.00	44,005.20	20,890.00	23,115.20	Arturo Rivera	Dec. 31, 1939	Bridge	0.48 Kms
	FAP 12A (1) Isabela-Aguadilla Road	March 27	April 4	7,523.00	1,410.00		8,933.00	1,100.57		10,042.57	4,055.00	5,987.57	Gabriel Benítez	Oct. 20, 1939	Landscaping	0.185 Kms
	FAP 14A (1) Trujillo Alto River Bridge	April 24	May 3	144,059.90		432.16	146,627.74	25,619.79	662.00	169,909.53	78,478.74	91,430.79	Roberts R. Prann	June 21, 1941	Bridge	0.635 Kms
	FAP 5B (1) Añasco-San Sebastián Road	May 4	May 16	52,611.10		6,401.31	46,209.79	11,923.79	361.00	58,494.58	24,594.31	33,900.27	Machargo & Corrada	April 5, 1941	Highway	2.049 Kms
	FAP 19A (1) Ponce-Jayuya Road	July 10	July 20	79,162.40	26,525.56		105,687.96	9,732.04	442.00	115,862.00	42,820.00	73,042.00	Francisco Nevares	Oct. 29, 1940	Highway	2.944 Kms
	FAP 19A (1) Palo Hincado River Bridge	July 11	July 21	18,538.00	103.52		18,642.52	4,823.25		23,465.77	9,980.00	13,485.77	Rafael Gallardo	July 1, 1940	Bridge	0.408 Kms
	FAP 6E (1) Orocovis-Coamo Road	July 11	July 21	92,178.50	4,994.19		97,172.69	12,387.26	1,521.00	111,080.95	50,185.00	60,895.95	José Carro Rivera	July 24, 1941	Highway	2.937 Kms
	FAP 21A (1) Adjuntas-Jayuya Road	July 15	July 24	14,961.30		161.13	14,800.77	3,484.75	415.00	18,700.52	7,829.45	10,871.07	José Pereyó	Feb. 4, 1941	Culverts	0.334 Kms
	FAP 4B (2) Utuado-Jayuya Road	Aug 23	Sept 13	11,163.05	602.10		11,765.60	2,903.20		14,668.80	5,974.92	8,693.88	Vicente Valdivieso Jr	June 30, 1940	Landscaping	0.207 Kms
	FAP 17A (1) Loina-Juncos Road	Oct 13	Oct 30	53,970.00		12,180.58	41,789.47	14,758.56	529.00	57,077.03	21,263.00	35,814.03	Rafael Gallardo	May 22, 1941	Highway	1.938 Kms
	FAP 18A (1) Merle River Bridge	Oct 17	Oct 30	75,782.00		1,714.40	74,067.60	14,958.13	1,062.00	90,087.73	37,664.13	52,423.60	Valiente & Co	June 21, 1941	Bridge	1.038 Kms
1940	FAP 22A (1) Loco River Bridge-Yauco	April 18	May 17	26,990.50	2,363.14		34,337.36	7,947.32		42,484.68	17,759.16	24,725.52	Valiente & Co	Feb. 10, 1942	Bridge	0.300 Kms
	FAP 2B (1) Adjuntas-Jayuya Road	July 31	Aug 10	10,682.25	4,644.93		67,307.43	5,216.59	376.00	72,900.02	33,135.00	39,765.02	M. Pereyó & A. Rivera	April 19, 1941	Highway	4.524 Kms
	FAP 6C (1) Orocovis-Coamo Road	June 10	June 20	62,662.50	3,597.32		14,279.57	4,592.30	1,084.00	19,955.87	5,585.00	14,370.87	José Pereyó	July 12, 1941	Culverts	0.429 Kms
	FAP 6C (1) Orocovis-Coamo Road	Sept 16	Sept 23	88,175.70		8,727.72	79,447.98	15,121.24	1,237.60	95,806.82	39,994.83	55,811.99	José Carro Rivera	July 12, 1942	Highway	2.662 Kms
	FAP 21C (1) Adjuntas-Jayuya Road	Dec 28	Jan 7, 1941	150,877.80	6,047.00		156,924.80	9,734.58	18,747.29	185,406.67	75,311.00	110,095.67	Arturo Rivera	July 26, 1941	Culverts	0.365 Kms
1941	FAP 11F (1) Quebradillas-Isabela Road	Feb 28	March 8	196,010.70			196,010.70	24,747.08		220,757.78	92,548.00	128,209.78	Arturo Rivera	May 28, 1942	Highway	4.877 Kms
	FAP 1C (1) San Juan-Rio Piedras Road	March 5	March 20	11,040.00	2,220.82		13,260.82	5,232.07	1,340.22	19,833.11	5,990.00	13,843.11	Alberto Pérez	Jan. 2, 1942	Highway	0.181 Kms
	FAP 20B (1) Santa Isabel-Salinas Road	March 31	April 19	32,067.30	4,550.01		36,653.31	9,219.15	300.00	46,202.46	17,350.00	28,852.46	Julio Nigaglioni	June 22, 1942	Bridge	0.537 Kms
	FAP 1A (1) Martín Fierro-Rio Piedras Road	Jan 1	May 5	12,247.70	1,252.36		13,500.06	3,738.09		17,238.15	5,990.00	11,248.15	Arturo Rivera	Dec. 9, 1941	Landscaping	0.412 Kms
	FAP 21D (1) Adjuntas-Jayuya Road	Jan 1	June 1	1,000.00			1,000.00	1,000.00		2,000.00	1,000.00	1,000.00	Arturo Rivera	June 10, 1942	Culverts	1.748 Kms
	Totals			\$3,016,920.75	\$358,053.91	\$47,270.16	\$3,357,704.51	\$428,069.73	\$86,127.28	\$3,871,901.52	\$1,617,050.60	\$2,254,850.92				

(1) Reseinded will be finished by force account.

(2) Under repairs.

GRAPHIC CHART SHOWING PROGRESS IN THE CONSTRUCTION OF INSULAR ROADS SINCE SPANISH REGIME

THIS INCLUDES ONLY ROADS CONSTRUCTED BY INSULAR GOVERNMENT

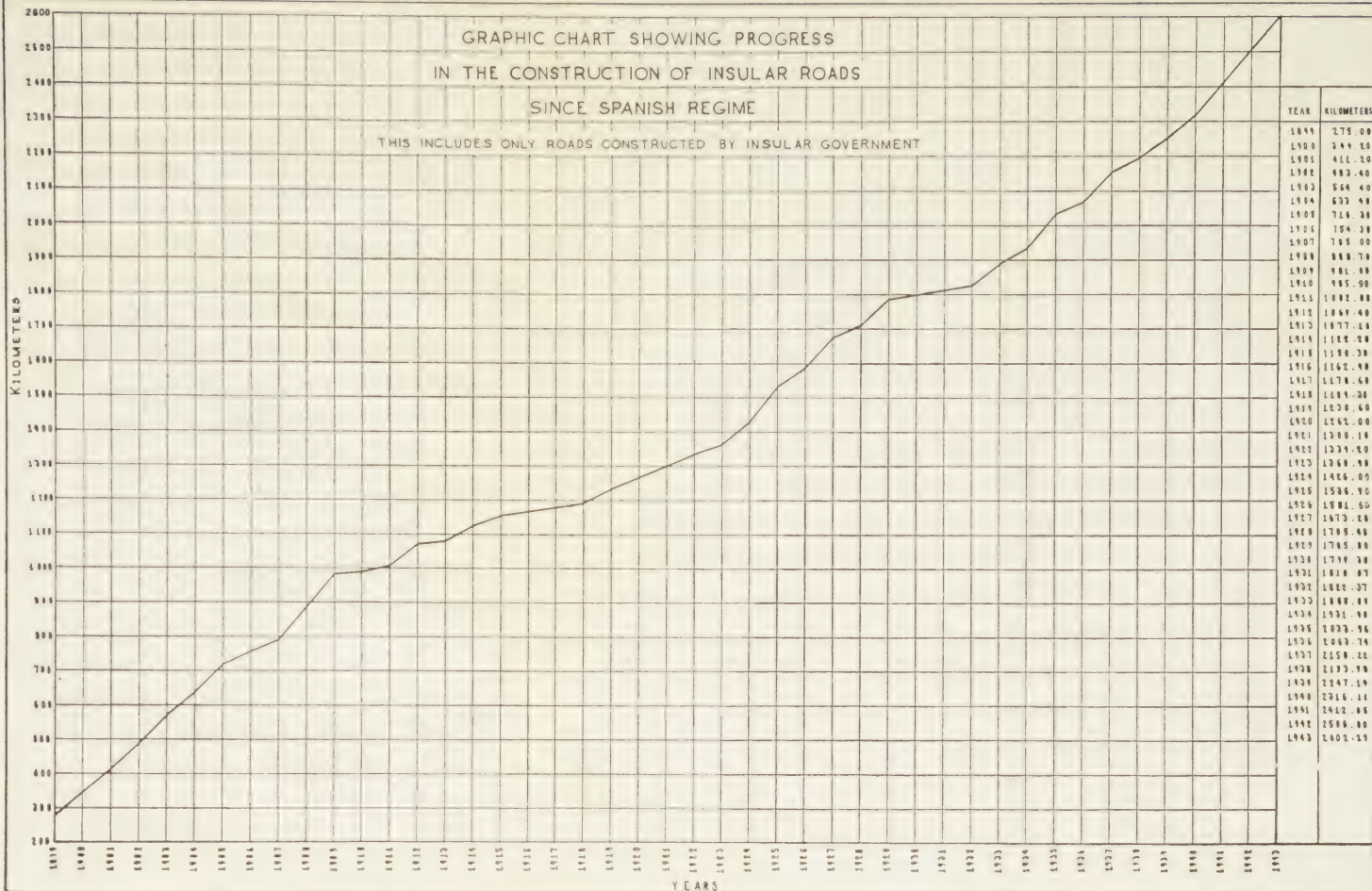
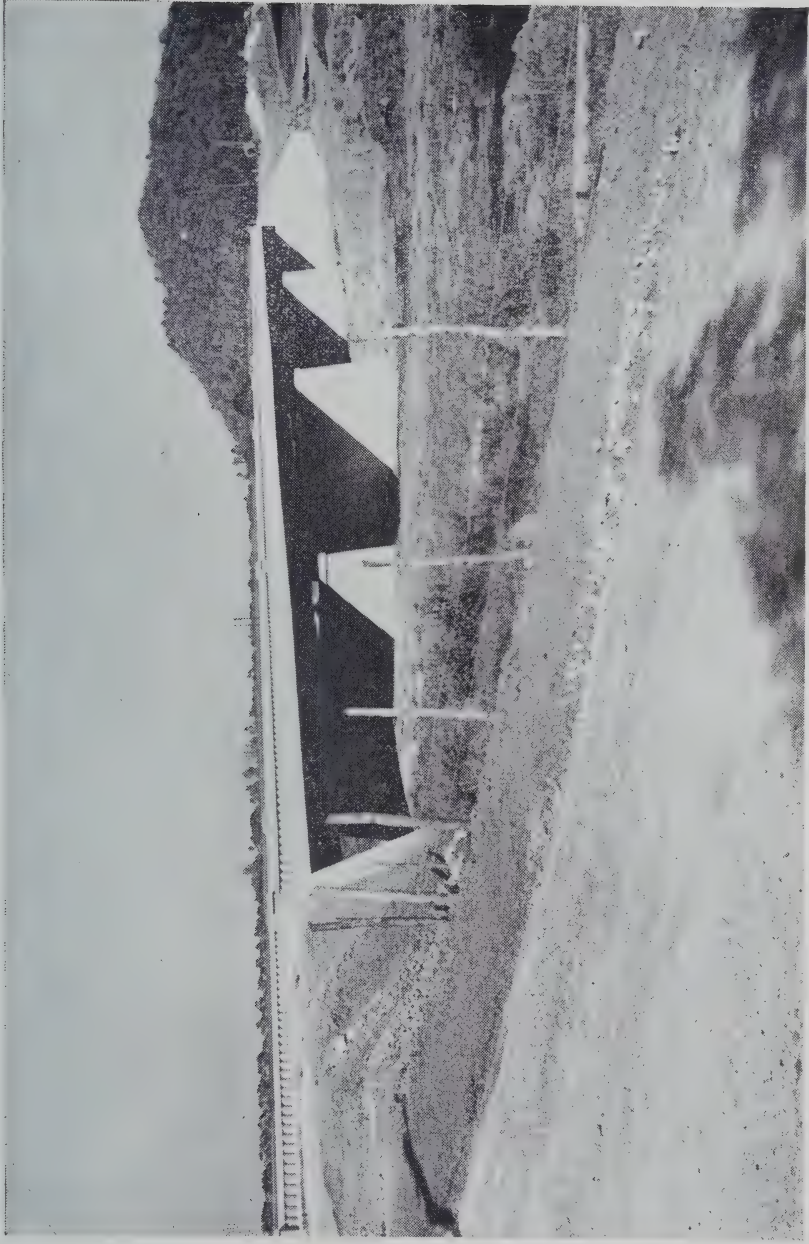


TABLE SHOWING GRADE CROSSING ELIMINATION PROJECTS CONSTRUCTED WITH FEDERAL AID SINCE 1938

Year	Name of Project	Date of Contract	Beginning of Work	Estimated Cost	Increases	Reductions	Paid to Contractors	Inspection	Rights of Way	Surveys and Designs	Total Cost	Federal Aid	Insurer Share	Contractor	Date of Completion	Length
1938	FAGH 11A (1) Quebradillas Isabela Road	Febr. 21	March 1	22,143.50	510.44		22,653.94	4,544.29	450.00	591.28	28,249.51	24,780.00	3,469.51	Irish E. Omatene	Febr. 15, 1939	0.379 Kms.
	FAGH 12A (1) Isabela-Arradilla Road	Febr. 21	March 1	12,907.50	1,381.13		36,988.63	1,810.54	400.00	823.73	49,222.70	46,750.00	2,472.70	Irish E. Omatene	March 4, 1939	0.222 Kms.
	FAGH 8A (1) Santurce-Bayamon Road	Sept. 20	Sept. 30	81,000.00	2,382.85		83,882.85	16,914.08	7,871.93	1,950.61	112,724.47	10,750.58	10,118.89	Patricia Carrero	March 11, 1943	0.360 Kms.
	FAGH 13A (1) Mayaguez-San German Road	July 22	Aug. 2	41,040.00		139.82	42,298.68	7,021.09	200.00	1,167.95	49,687.87	45,444.00	4,243.87	Herman Escobar	April 18, 1939	0.529 Kms.
	FAGH 9A (1) Barceloneta-Latilla Road	March 18	March 20	61,541.10	33,719.36		95,260.46	16,754.72	2,063.47	2,117.45	117,087.65	83,120.00	33,967.65	Consuelo Carrero	March 30, 1941	0.580 Kms.
1940	FAGH 8B (1) Santurce-Bayamon Road	June 12	June 21	100,981.25		12,641.18	124,932.43	31,110.58	42,304.91	3,648.05	201,448.61	24,664.00	20,000.00	Leon S. Ariza	June 25, 1942	0.560 Kms.
	FAGH 9B (1) Barceloneta-Latilla Road	April 26	May 14	96,434.90	33,911.05		130,345.95	25,535.57	21,099.50	8,339.94	185,981.06	16,750.00	16,000.00	Vanderbilt Co.	June 20, 1942	0.276 Kms.
	FAGH 10A (1) Canales-Arreche Road	May 4	May 14	50,703.15	1,620.70		72,409.85	11,088.34	4,780.98	3,606.92	92,145.09	86,444.00	5,701.09	Armando Carrero	Oct. 15, 1941	0.553 Kms.
					544,305.40	26,640.64	607,858.94	122,245.76	77,074.92	22,491.95	829,668.87	552,687.77	276,981.10			

TABLE SHOWING SECONDARY ROADS CONSTRUCTED WITH FEDERAL AID SINCE 1937

Year	Name of Project	Date of Contract	Beginning of Work	Estimated Cost	Increases	Reductions	Paid to Contractors	Inspection	Rights of Way	Cost	Federal Aid	Insurer Share	Contractor	Date of Completion	Length of Project	
1937	FAS 1A (1) Miradero Road-Mayaguez	Sept. 28	Oct. 8	831,798.49		1,472.06	833,270.55	99,325.83	5,571.41	100.00	47,967.24	47,967.00	10,000.24	Hiram Escobar	Nov. 2, 1938	1.014 Kms.
	FAS 2A (1) Carmen Road-Mayaguez	Sept. 27	Sept. 29	36,157.50		1,421.00	44,730.50	4,730.50	3,280.31	126.00	48,942.81	48,942.00	10,000.81	Crane Pitts & Co.	Feb. 26, 1938	2.295 Kms.
	FAS 3A (1) Aguas Buenas-Coruyababo Road	Sept. 27	Oct. 4	67,433.50	7,579.56		75,013.06	8,425.76	686.00	82,544.82	82,544.00	12,000.82	Raymond Mac. Rong	June 6, 1939	4.722 Kms.	
	FAS 4A (1) Canolarias Road-Ton Alto	Sept. 17	Sept. 27	61,581.00	6,347.35		70,928.35	6,610.98	3,225.00	80,764.33	87,500.00	15,735.67	Vanderbilt Co.	Jan. 22, 1939	7.157 Kms.	
1938	FAS 5A (1) Uruguay Road-Patillas	May 31	June 9	25,004.50	2,584.28		27,588.78	3,082.05	580.00	32,150.83	33,000.00	10,000.83	Armando Carrero	June 5, 1939	3.9 Kms.	
	FAS 10A (1) J. M. Vargas Road-Moca	Oct. 30	Oct. 18	27,703.00	268.86		28,971.86	7,188.28	250.00	35,470.14	35,488.00	20,000.14	Armando Carrero	July 30, 1940	2.5 Kms.	
	FAS 8A (1) Road Arroyo Road-Ponce	Nov. 29	Dec. 9	41,000.00	2,458.15		43,458.15	3,960.83	100.00	50,219.98	50,183.00	10,000.98	James Barry	Dec. 31, 1940	1.991 Kms.	
	FAS 9A (1) Guanajibos Road-Caba Ruy	Dec. 12	Dec. 23	28,920.50	2,240.42		31,160.92	10,188.05	441.85	42,400.82	42,800.00	20,000.82	Jose Carlos Romero	Jan. 31, 1941	3.725 Kms.	
	FAS 6A (1) Copey Alto Road-Rio Piedras	March 23	April 5	50,276.00	1,177.45		51,453.45	11,391.26	100.00	63,104.71	63,105.00	10,000.71	Rafael Montano Contreras	Dec. 27, 1939	3.492 Kms.	
1939	FAS 7A (1) Cuyin Road-Albaretto	May 18	May 22	27,600.00	2,142.30		29,742.30	3,173.29	308.50	33,223.09	33,440.00	28,800.09	Vanderbilt Co.	Dec. 25, 1939	3.448 Kms.	
	FAS 11A (1) Joyuda-Esmeralda-Correcional Road	June 16	July 5	39,158.40	168.86		40,327.26	6,290.74	3,070.00	48,697.00	50,100.00	27,000.00	Leon Pitts	Dec. 23, 1939	2.841 Kms.	
	FAS 11B (1) Joyuda-Esmeralda-Correcional Road	Aug. 24	Sept. 2	44,914.00		3,715.00	48,629.00	11,027.23	1,715.19	56,941.33	58,472.12	15,000.00	Leon Pitts	Feb. 17, 1941	1.90 Kms.	
	FAS 12A (1) Quebrada Arenas Road-Ton Alto	Febr. 13	Febr. 26	45,466.30		354.56	45,111.74	15,111.74	90.00	64,308.04	64,310.00	25,000.00	Raymond Mac. Rong	April 26, 1941	3.507 Kms.	
1940	FAS 13A (1) Munoz Rivera Road-Patillas	May 17	May 27	52,891.50			53,912.56	8,966.11	1,025.00	63,903.67	64,900.00	25,000.67	San Manuel Gonzalez Martinez	June 17, 1942	2.221 Kms.	
	FAS 12B (1) Quebrada Arenas Road-Ton Alto	April 30	May 13	61,682.15	6,772.73		68,454.88	10,083.85	1,834.70	81,270.44	83,700.00	47,480.00	Vanderbilt Co.	Sept. 22, 1942	5.005 Kms.	
				636,851.39	32,027.86	7,942.25	660,937.10	113,850.21	13,754.24	788,541.55	328,341.93	460,199.52				



REYES CATOLICOS BRIDGE ACROSS LA PLATA RIVER.
KM. 25.5
INSULAR ROAD No. 2.

Sergio Cuevas Bustamante, Commissioner of the Interior.

Contractor: Raúl Gayá

MAINTENANCE AND REPAIR OF HIGHWAYS, ROADS AND BRIDGES

The task imposed upon the Road Maintenance Division during the fiscal year ending June 30, 1943 was far greater than in previous years due to the prevailing war emergency. Roads, bridges and culverts were maintained and repaired and in many cases improved to facilitate increased military traffic and to reduce inconveniences to civil transportation so much affected by war restriction.

The sum of \$1,571,763.61 was expended in the maintenance, repair and improvements to roads and bridges. Pursuant to Law, \$1,500,000 of the proceeds of the gasoline tax were allocated for the purpose. The balance of \$71,763.61 was income derived from rental of equipment to contractors and municipalities; sale of crushed stone to other Government agencies and other miscellaneous transactions. The following statement gives a summary of the operations and expenditures of the Division.

Improvements to roads, including labor, and acquisition of rock, asphalt and gravel-----	\$391,140.05
Maintenance expenses including labor, patching of road surface and cleaning of side ditches and shoulders-----	667,623.87
Purchase and maintenance of tools and equipment-----	117,055.93
Maintenance and reconstruction of bridges, culverts, retaining walls and road houses -----	134,399.39
Office rents, light, water, telephone and telegraph services-----	10,531.81
Removal of landslides and general cleaning-----	84,927.85
Travel expenses -----	23,992.53
Surcharge, Bureau of Supplies, Printing and Transportation---	6,400.00
Insurance premium on laborers and employees-----	28,353.22
Miscellaneous expenses-----	50,379.30
Asphalt on hand as of June 30, 1943 (373,506 Gals.)-----	56,959.66
 Total -----	 \$1,571,763.61

A large number of new roads constructed on previous years by either Federal, Municipal or Insular Government were turned over to this Division for their maintenance. In order to keep the surface of the insular roads to their maximum serviceability under the existing heavy traffic and to prevent abnormal deterioration of structures and of supplementary appurtenance, the maintenance field force was increased to 813 road menders under the supervision of approximately

100 foremen. Salaries paid to road menders, foremen and other field employees amounted to \$521,489.25 for the whole period.

The plan for the re-asphalting of those roads which had been previously treated with bituminous material as well as the asphaltting of new macadam roads, was continued. Although the asphaltic material was not received until the second semester of the year due to difficulties of transportation facilities a total of 19 kilometers of roads were asphalted. Out of the total length of 2,877 kilometers of roads under the Maintenance Division, 2,757 kilometers had been treated with asphalt up to June 30, 1943. The sum of \$236,631.57 was invested in the purchase and transportation of asphalt and gravel.

Bridges, culverts, road houses and other appurtenances most of which were constructed many years ago, were repaired and maintained and in many instances completely reconstructed. The tables attached show the expenditures for such works.

During the year 1942-1943, the Island-wide Project for the widening and improvement of curves and roads was continued in cooperation with the Work Projects Administration. Of the total amount of \$540,000 expended by the Department of the Interior in this project, the Maintenance Division contributed with the sum of \$150,000, the balance of \$390,000 being appropriated by Act No. 207 of May 11, 1942, for the purpose. For this work the Work Projects Administration contributed with the sum of \$1,456,334. This project not only conduced to the improvements of roads but also helped to relieve unemployment throughout the Island. The scope of this work covered those roads considered essential to the National Defense Program, among which the following are the most important: Road No. 1, San Juan—Ponce; Road No. 2, San Juan—Camp Buchanan—Mayagüez; Road No. 25, Cataño—Guaynabo; Road No. 61, Juana Díaz—Losey Field; Road No. 47, Cayey—Salinas; Road No. 12, San Lorenzo—Patillas; Road No. 6 Ponce—Utuado; Road No. 28, Juncos—Naguabo and Road No. 5, Caguas—Juncos.

As in previous years it was necessary to hire laborers to help the road maintenance personnel in the removal of numerous landslides from our roads caused by the excessive heavy rains. The sum of \$84,927.85 was spent during the year for the payment of such extra laborers.

Due to the increase of activities during the year and to the fact that most of the heavy maintenance equipment has been in service for the last fifteen or twenty years, it was made necessary to acquire additional units of equipment as well as repair parts to maintain the equipment on hand in proper working condition.

In addition to the above mentioned activities the Road Maintenance Division prepared and put in operation thirty new projects with a sum of \$200,000 allocated by the Insular Emergency Council for the widening and the improvement of those roads and bridges considered necessary by the Commissioner of the Interior. These projects were scattered around the Island and especially in those Municipalities where relief for unemployment was more necessary. As the total sum assigned was only partially used during the year, work on these projects will be continued during the year 1943-44.

TABLE No. 1
STONE PURCHASED

Year	By Contract			By Administration			Total for the year		
	Cubic meters	Total cost	Ave. per cb. m.	Cubic meters	Total cost	Ave. per cb. m.	Quantity cb. ms.	Total cost	Cost per cb. m.
1934.....				33,761.00	\$52,672.89	1.56	33,761.00	\$52,672.89	\$1.56
1935.....	4,980.00	\$12,355.20	2.48	21,631.00	30,533.92	1.41	26,611.00	42,889.13	1.61
1936.....				19,201.00	35,674.74	1.86	19,201.00	35,674.74	1.86
1937.....	26,530.00	50,022.28	1.88	18,259.00	36,871.14	2.02	44,789.00	86,953.42	1.94
1938.....	57,935.00	96,446.57	1.68	3,463.00	6,295.62	1.81	61,403.00	102,743.19	1.69
1939.....	39,035.00	67,137.11	1.72	12,345.00	14,852.01	1.20	51,380.00	81,989.12	1.60
1940.....	52,812.00	93,051.38	1.77	46,903.00	82,425.64	1.76	99,720.00	175,477.02	1.76
1941.....	1,650.00	2,970.00	1.80	55,216.00	105,708.81	1.91	56,866.00	108,678.81	1.91
1942.....				68,696.00	142,535.41	2.07	68,696.00	142,535.41	2.07
1943.....				47,414.00	76,249.49	*1.60	47,414.00	76,249.49	1.60

* The cost of the purchase of stone appears low due to the fact that part of the labor used was furnished by the WPA.

TABLE No. 2
STONE PLACED

Year	Total cubic meters placed	Total Cost	Ave. Cost of placing per cb. m.	Ave. cb. meter placed per kilometer
1934.....	40,659.00	\$28,011.88	\$0.69	54.10
1935.....	31,097.00	27,002.92	0.87	19.70
1936.....	18,742.00	21,512.05	1.20	34.36
1937.....	42,429.00	46,904.63	1.08	25.84
1938.....	68,945.00	72,068.50	1.04	72.50
1939.....	52,727.00	45,480.30	0.86	67.80
1940.....	83,022.00	85,772.17	1.01	36.15
1941.....	66,250.00	64,581.81	0.98	25.98
1942.....	67,851.00	126,963.02	1.87	25.25
1943*.....	36,508.00	49,373.12	1.33	12.70

* The cost per cubic meter appears low due to the fact that part of the labor used was furnished by the WPA.

BRIDGES PAINTED AND REPAIRED

Repairs to bridge at Km. 3.8, Road No. 1	\$835.50
Repairs to bridge at Km. 8.0, Road No. 1	2, 114.20
Repairs to bridge at Km. 0.2, Road No. 2	884.70
Repairs to bridge at Km. 60.0, Road No. 2	3, 490.96
Repairs to bridge at Km. 100.0, Road No. 2	188.91
Repairs to bridge at Km. 176.5, Road No. 2	3, 632.27
Repairs to bridge at Km. 231.6, Road No. 2	491.45
Repairs to bridge at Km. 6.6, Road No. 3	36.00
Repairs to bridge at Km. 2.9, Road No. 5	2, 646.41
Repairs to bridge at Km. 1.1, Road No. 7	1, 107.13
Repairs to bridge at Km. 17.1, Road No. 8	143.21
Repairs to bridge at Km. 10.5, Road No. 10	102.50
Repairs to bridge at Km. 11.1, Road No. 11	3, 997.17
Demolition and repairs— Road No. 13	4, 976.19
Repairs to bridge at Km. 9.8, Road No. 23	133.00
Repairs to bridge at Km. 24.2, Road No. 23	1, 788.99
Repairs to bridge at Km. 1.3, Road No. 36	214.34
Repairs to bridge at Km. 1.5, Road No. 37	669.48
Repairs to bridge at Km. 3.3, Road No. 37	167.03
Repairs to bridge at Km. 2.3, Road No. 41	1, 340.94
Repairs to bridge at Km. 13.0, Road No. 44	111.33
Repairs to bridge at Km. 4.3, Road No. 55	143.97
Repairs to bridge at Km. 4.1, Cataño-Sabana Seca	174.61
Repairs to bridge at Km. 0.1, Mayagüez-Leguísamos	167.80
Repairs to bridge at Km. 0.2, Manatí-Río Arriba	1, 649.81
Total	\$31, 207.90

CULVERT AND OTHER STRUCTURES

Repairs to culvert at Km. 3.5, Road No. 3	\$172.62
Repairs to culvert at Km. 7.8, Road No. 3	214.65
Construction of culvert at Km. 80.5, Road No. 3	7, 068.38
Repairs to culvert at Km. 9.6, Road No. 3	700.08
Repairs to culvert at Km. 10.5, Road No. 3	542.10
Repairs to culvert at Km. 26.4, Road No. 5	180.00
Repairs to culvert at Km. 16.1, Road No. 9	1, 524.35
Repairs to culvert at Km. 25.1, Road No. 9	442.46
Repairs to culvert at Km. 25.4, Road No. 9	127.60
Repairs to culvert at Km. 25.5, Road No. 9	1, 187.30
Repairs to culvert at Km. 26.2, Road No. 9	147.50
Repairs to culvert at Km. 25.8, Road No. 9	507.00
Construction of culvert at Km. 29.5, Road No. 9	3, 518.98
Repairs to culvert at Km. 35.4, Road No. 9	295.70
Repairs to culvert at Km. 10.1, Road No. 14	445.71
Construction to culvert at Km. 15.8, Road No. 18	1, 454.98
Repairs to culvert at Km. 13.2, Road No. 22	97.88
Repairs to culvert at Km. 3.6, Cataño-Palo Seco	392.73
Total	\$19, 020.02

STRUCTURES

Construction of 2 structures at Km. 172.173, Road No. 2-----	\$207.82
Construction of 1 structure at Km. 234.0, Road No. 2-----	399.20
Construction of 1 structure at Km. 2.5, Road No. 6-----	405.55
Construction of 1 structure at Km. 19.5, Road No. 6-----	256.69
Construction of 1 structure at Km. 41.13, Road No. 13-----	226.19
Construction of 1 structure at Km. 11.9, Road No. 14-----	729.81
Repairs to structures at Km. 10.2, Road No. 15-----	241.60
Construction of 4 structures at Km. 13.21, Road No. 15-----	1,003.16
Construction of 1 structure at Km. 45.1, Road No. 15-----	281.89
Construction of 1 structure at Km. 21.4, Road No. 15-----	375.00
Construction of structures at Km. 10.9, Road No. 15-----	515.50
Repairs to structures at Km. 10.4, Road No. 20-----	170.15
Construction of structures at Km. 13.8, Road No. 22-----	878.28
Construction of structures at Km. 16.1, Road No. 34-----	277.85
Construction of structures at Km. 3.7, Road No. 52-----	348.04
Construction of structures at Km. 13.1, Road No. 56-----	1,310.07
Construction of structures at Km. 5.0, Road No. 56-----	782.67
Construction of structures at Km. 4.0, Manatí-Río Arriba-----	134.95
Construction of 3 structures at Km. 4.2-8, Las Marías-Buena Vista	1,093.37
Repairs to structures at Km. 3.2, Humacao-Antón Ruiz-----	312.12
Construction of culvert at Km. 0.1, Adjuntas-Vega Arriba-----	209.28
Repairs to structures at Km. 1.4, Naguabo-Mariana-----	303.21
General repairs to 14 small structures-----	1,239.17
<hr/>	
Total-----	\$11,701.57

RETAINING WALLS

Repairs to a retaining wall at Km. 125.1, Road No. 2-----	\$167.84
Repairs to a retaining wall at Km. 180.9, Road No. 2-----	157.60
Repairs to a retaining wall at Km. 181.5, Road No. 2-----	306.25
Repairs to a retaining wall at Km. 73.8, Road No. 3-----	224.00
Repairs to a retaining wall at Km. 93.1, Road No. 3-----	212.38
Construction of a retaining wall at Km. 46.8, Road No. 3-----	977.54
Construction of a retaining wall at Km. 0.3, Road No. 5-----	231.88
Construction of a retaining wall at Km. 6.7, Road No. 5-----	248.60
Repairs to a retaining wall at Km. 17-18, Road No. 5-----	279.60
Construction of a retaining wall at Km. 22.0, Road No. 6-----	5,506.45
Construction of a retaining wall at Km. 22.1, Road No. 8-----	1,012.77
Repairs to a retaining wall at Km. 35.2, Road No. 9-----	251.80
Construction of a retaining wall at Km. 25.2, Road No. 9-----	3,942.08
Repairs to a retaining wall at Km. 25.8, Road No. 9-----	155.20
Construction of a retaining wall at Km. 5.2, Road No. 10-----	701.83
Construction of a retaining wall at Km. 45.1, Road No. 11-----	1,064.20
Repairs to a retaining wall at Km. 44.9, Road No. 11-----	156.40
Repairs to a retaining wall at Km. 17.4, Road No. 11-----	216.63
Construction of a retaining wall at Km. 13.8, Road No. 11-----	1,385.89
Repairs to a retaining wall at Km. 16.0, Road No. 11-----	311.35
Construction of a retaining wall at Km. 17.5, Road No. 11-----	172.14
Repairs to a retaining wall at Km. 12.9, Road No. 13-----	112.90
Construction of a retaining wall at Km. 9.3, Road No. 14-----	814.40
Repairs to a retaining wall at Km. 10.2, Road No. 14-----	111.00
Construction of a retaining wall at Km. 10.3, Road No. 14-----	519.70
Construction of a retaining wall at Km. 11.9, Road No. 14-----	1,025.66
Construction of a retaining wall at Km. 15.9, Road No. 15-----	318.00
Construction of a retaining wall at Km. 16.8, Road No. 16-----	383.60
Construction of a retaining wall at Km. 16.6, Road No. 17-----	1,700.00
Repairs to a retaining wall at Km. 9.7, Road No. 18-----	170.00
Construction of a retaining wall at Km. 17.4, Road No. 20-----	1,343.09
Construction of a retaining wall at Km. 10.1, Road No. 27-----	669.41
Construction of a retaining wall at Km. 2.12 Road No. 27-----	732.57
Construction of a retaining wall at Km. 14.1, Road No. 27-----	601.43
Construction of a retaining wall at Km. 20.5, Road No. 27-----	548.88
Construction of a retaining wall at Km. 7.8, Road No. 36-----	432.95
Repairs to a retaining wall at Km. 3.5, Road No. 36-----	202.48
Construction of a retaining wall at Km. 6.0, Road No. 41-----	3,345.47
Construction of a retaining wall at Km. 2.2, Road No. 44-----	394.30
Repairs to a retaining wall at Km. 26.7, Road No. 47-----	207.81
Construction of a retaining wall at Km. 0.1, Road No. 49-----	580.64
Construction of a retaining wall at Km. 0.2, Road No. 65-----	755.59
Construction of a retaining wall at Río Piedras-Caguas Via-----	2,379.86
Repairs to a retaining wall at Km. 0.1, Jayuya-Coabey-----	182.08
Construction of a retaining wall at Km. 5.1, Juana Díaz-Collores--	1,373.20
Construction of a retaining wall at Km. 2.1, Utuado-Viví-----	1,124.92
Minor repairs to 7 retaining walls-----	456.21
Total-----	\$39,722.25

REPAIRS AND RECONSTRUCTION OF ROAD HOUSES

Repairs, painting and improvement of road house at Km. 10.6, Road No. 1 -----	\$729.56
Repairs, painting and improvement of road house at Km. 34.5, Road No. 1 -----	323.13
Repairs, painting and improvement of road house at Km. 9.2, Road No. 1 -----	3,384.43
Repairs, painting and improvement of road house at Km. 103.10, Road No. 1 -----	178.92
Repairs, painting and improvement of road house at Km. 109.10, Road No. 1 -----	149.42
Repairs, painting and improvement of road house at Km. 60.0, Road No. 1 -----	608.95
Repairs, painting and improvement of road house at Km. 79.1, Road No. 1 -----	328.76
Repairs, painting and improvement of road house at Km. 128.3, Road No. 3 -----	140.75
Repairs, painting and improvement of road house at Km. 183.2, Road No. 3 -----	179.26
Repairs, painting and improvement of road house at Km. 39-43, Road No. 8 -----	420.04
Repairs, painting and improvement of road house at Km. 1.6, Road No. 16 -----	887.70
Repairs, painting and improvement of road house at Km. 5.1, Road No. 16 -----	712.71
Repairs, painting and improvement of road house at Km. 7.4, Road No. 16 -----	757.70
Repairs, painting and improvement of road house at Km. 10.5, Road No. 16 -----	682.51
Repairs, painting nad improvement of road house at Km. 13.5, Road No. 16 -----	772.16
Repairs, painting and improvement of road house at Km. 16.7, Road No. 16 -----	655.02
Repairs, painting and improvement of road house at Km. 21.4, Road No. 16 -----	573.20
Repairs, painting and improvement of road house at Km. 25.6, Road No. 16 -----	1,193.88
Repairs, painting and improvement of road house at Km. 4.7, Road No. 24 -----	505.43
Reconstruction of road house at Km. 3.2, Road No. 41 -----	4,358.48
Reconstruction of road house at Km. 5, Road No. 41 -----	11,172.78
Viaducto Calle A km. (repairs) -----	3,075.90
Small repairs to five roadmender houses -----	494.96
Total -----	\$32,747.65

ASPHALTED ROADS

Road No.	Section	Total Length	Total Leanth Asphalted		
			Up to June 30 1942	During 1942-1943	Up to June 30 1943
1.....	San Juan-Ponce.....	136.7	136.7	.....	136.7
2.....	Santurce-Ponce.....	263.2	263.2	.....	263.2
3.....	Río Piedras-Ponce.....	199.7	199.7	.....	199.7
4.....	Cayey-Guayama.....	26.1	26.1	.....	26.1
5.....	Caguas-Humacao.....	28.7	28.7	.....	28.7
5.....	Caguas-Comerio.....	23.5	23.5	.....	23.5
6.....	Ponce-Arecibo.....	81.8	81.8	.....	81.8
7.....	Caguas-Las Piedras.....	22.0	22.0	.....	22.0
8.....	Aguadilla-Adjuntas.....	82.4	82.4	.....	82.4
9.....	Bayamón-Barranquitas.....	43.7	43.7	.....	43.7
10.....	Reyes Católicos-Coamo.....	77.2	77.2	.....	77.2
11.....	Manatí-Juana Díaz.....	67.8	67.8	.....	67.8
12.....	San Lorenzo-Patillas.....	34.0	34.0	.....	34.0
13.....	Arecibo-Lares.....	33.6	33.6	.....	33.6
13.....	Mayagüez-San Sebastián.....	41.8	41.8	.....	41.8
14.....	Consumo-Indiera.....	31.4	31.4	.....	31.4
15.....	Alto Banderas-Casa Blanca.....	33.4	33.4	.....	33.4
15.....	Aibonito-Orocovis.....	27.2	27.2	.....	27.2
16.....	Yauco-Lares.....	35.4	35.4	.....	35.4
17.....	Utua-Jayuya.....	19.5	19.5	.....	19.5
17.....	Utua-Lares.....	21.2	21.2	.....	21.2
18.....	Hormigueros-Cabo Rojo-Boquerón.....	17.7	17.7	.....	17.7
19.....	Lajas-Boquerón.....	10.0	10.0	.....	10.0
20.....	Pte. La Plata-Naranjito-Corozal.....	16.9	16.9	.....	16.9
20.....	Campamento-Morovis-Cotozal.....	21.7	21.7	.....	21.7
21.....	Coamo-Los Baños.....	1.7	1.7	.....	1.7
22.....	Comerio-Cidra-Las Cruces.....	22.5	22.5	.....	22.5
23.....	Río Piedras-Gurabo.....	25.1	25.1	.....	25.1
24.....	Cataño-Bayamón.....	7.2	7.2	.....	7.2
25.....	Cataño-Guaynabo.....	13.8	13.8	.....	13.8
26.....	Utua-Barceloneta.....	5.5	5.5	.....	5.5
26.....	Barceloneta-Utua.....	22.0	22.0	.....	22.0
27.....	Mayagüez-Maricao.....	25.8	25.8	.....	25.8
28.....	Naguabo-Juncos.....	24.6	24.6	.....	24.6
29.....	Cabo Rojo-San Germán.....	7.4	7.4	.....	7.4
30.....	Vega Baja-Morovis.....	11.2	11.2	.....	11.2
31.....	Calle Europa-De Diego-Loíza.....	2.3	2.3	.....	2.3
32.....	Barrio Obrero-Río Piedras.....	6.2	6.2	.....	6.2
33.....	Hatillo-Bayaney.....	8.0	8.0	.....	8.0
34.....	Camuy-San Sebastián.....	29.2	29.2	.....	29.2
35.....	Miramar-Martin Peña.....	2.1	2.1	.....	2.1
36.....	Guayanilla-Ponce.....	24.0	24.0	.....	24.0
37.....	Mayagüez Correccional.....	5.2	5.2	.....	5.2
38.....	Isabel II-Punta Arenas-Vieques.....	13.3	13.3	.....	13.3
39.....	San Germán-Yauco.....	34.6	34.6	.....	34.6
40.....	Añasco-San Sebastián.....	17.1	17.1	.....	17.1
41.....	Marina-Martin Peña.....	6.5	6.5	.....	6.5
42.....	Bayamón-Toa Alta.....	11.2	11.2	.....	11.2
43.....	Canóvanas-Juncos.....	12.6	12.6	.....	12.6
44.....	Loíza-Río Grande.....	19.0	19.0	.....	19.0
45.....	Hato Rey-Sanatorio.....	4.5	4.5	.....	4.5
46.....	Río Piedras-Sanatorio.....	5.0	5.0	.....	5.0
47.....	Cayey-Salinas.....	33.0	33.0	.....	33.0
48.....	Aibonito-Cayey-Salinas.....	4.3	4.3	.....	4.3
49.....	Cidra-Cayey.....	8.7	8.7	.....	8.7
50.....	San Germán-Las Vegas.....	11.2	11.2	.....	11.2
51.....	Ponce-Jayuya.....	13.6	13.6	.....	13.6
51.....	Jayuya-Ponce.....	7.7	7.7	.....	7.7
52.....	Ramal Toa Baja-Dorado.....	5.0	5.0	.....	5.0
53.....	Ramal Dorado.....	7.0	7.0	.....	7.0
54.....	Puente La Vega-Morovis.....	14.9	14.9	.....	14.9
55.....	Barceloneta-Arecibo.....	22.0	19.8	1.0	20.8
56.....	Lajas-Sabana Grande.....	13.1	13.1	.....	13.1
57.....	Santurce-Carolina.....	12.6	12.6	.....	12.6
58.....	Carolina-Juncos.....	10.6	10.4	.....	10.4
59.....	Fajardo-Playa.....	2.2	2.2	.....	2.2
60.....	Ceiba-Ensenada.....	4.3	4.3	.....	4.3
61.....	Juana Díaz-Litoral.....	6.9	6.9	.....	6.9
62.....	Guayama-Carite.....	8.1	8.1	.....	8.1
63.....	Bayamón-Aguas Buenas.....	7.6	7.6	.....	7.6
64.....	Buenos Aires-Lares.....	5.3	4.8	.....	4.8
65.....	Villalba-Orocovis.....	11.3	11.3	.....	11.3
66.....	Puerto Real-Cabo Rojo.....	4.2	4.2	.....	4.2
67.....	Leprocomio-Río Piedras.....	2.4	2.4	.....	2.4

ASPHALTED ROADS—Continued

Road No.	Sectorio	Total Length	Total Length Asphalted		
			Up to June 30 1942	During 1942-1943	Up to June 30 1943
68.	Quebradillas-Guajataca.	9.3	9.3		9.3
69.	Puerto Real Vieques.	10.1	10.1		10.1
70.	Punta Arenas-Vieques.	6.4	6.4		6.4
71.	Parguera-Lajas.	3.2	3.2		3.2
72.	Parque Colón-Aguadilla.	1.5	1.5		1.5
73.	Asasco-Rincón.	8.7	8.7		8.7
74.	San Germán-Rosario.	7.4	7.4		7.4
75.	Río Arriba-Saliente-Manatí.	8.2	8.2		8.2
76.	Malecón Puerto Mayagüez.	1.2	1.2		1.2
77.	Coamo-Santa Isabel.	13.6	13.6		13.6
78.	Ramal-Hornigueros.	2.2	2.3		2.3
Street	Emp. Carr. No. 1 y Carr. No. 41.	0.1	0.1		0.1
Street	R. Mariano Pardo-Cataño.	1.0	1.0		1.0
Street	Sánchez López-Cataño.	0.8	0.8		0.8
Street	Avenida Nereida-Cataño.	1.0	1.0		1.0
Road	Guaynabo-Acueducto.	7.0	7.0		7.0
Road	Río Piedras-Cupey Alto.	11.4	11.4		11.4
Road	Trujillo Alto-Carraizo.	6.6	6.6		6.6
Road	Carolina-Canovillas.	8.0	8.0		8.0
Road	Ingenio-Sabana Seca.	2.0	2.0		2.0
Road	Cataño-Sabana Seca.	11.0	11.0		11.0
Road	Naranjito-Barrio Nuevo.	3.8	3.8		3.8
Road	Corozal-Palos Blancos.	5.0	5.0		5.0
Road	Guaynabo-Luis Aleandrino.	1.2	1.2		1.2
Road	Aguas Buenas-Jagueyes.	9.7	9.7		9.7
Road	Toa Alta-Los Cocos.	8.6	6.0	2.6	8.6
Road	Naranjito-Achote.	3.4	3.4		3.4
Road	Toa Alta-Quebrada Arenas.	10.5	10.5		10.5
Road	Pájaros-Candelaria.	2.0	2.0		2.0
Road	Bayamón-Buena Vista.	2.2	2.2		2.2
Road	Cataño-Palo Seco.	1.0	1.0		1.0
Road	Corozal-Palmarito.	2.0	2.0		2.0
Road	Guaynabo-Santa Rosa.	4.6	4.6		4.6
Road	Santurce-Boca Cangrejos.	2.3	2.3		2.3
Road	Cataño-Palmas.	4.6	4.6		4.6
Road	Bayamón-Cerro Gordo.	2.4	2.4		2.4
Road	Guaynabo-Hato Nuevo.	1.0	1.0		1.0
Road	Caguas-Cañaboncito.	3.4	3.4		3.4
Road	Río Piedras-Caguas-Vías.	15.0	6.7		6.7
Road	Naranjito-Higuillales.	2.0	2.0		2.0
Road	Naranjito-Lomas.	2.0	2.0		2.0
Road	Trujillo Alto-Variante.	1.8	1.8		1.8
Road	Caserío J. Severo Quiñones.	8.0	8.0		8.0
Road	Dorado-Maguayo.	4.4	4.4		4.4
Road	Vega Alta-Espinosa.	1.8	1.8		1.8
Road	Vega Alta-Río Lajas.	3.9	3.9		3.9
Road	Vega Alta-Maricao.	2.1	2.1		2.1
Road	Vega Alta-Candelaria.	12.9	12.9		12.9
Road	Vega Alta-Sabana Hoyos.	6.0	6.0		6.0
Road	Vega Baja-Río Arriba.	3.0	3.0		3.0
Road	Vega Baja-Puerto Nuevo.	6.0	6.0		6.0
Road	Vega Baja-Algarrobo.	4.0		4.0	4.0
Road	Manatí-Barriadas.	3.0	3.0		3.0
Road	Manatí-Tierras Nuevas.	3.0	3.0		3.0
Road	Manatí-Río Arriba Poniente.	12.0	12.0		12.0
Road	Barceloneta-Garrapatas.	2.9	2.9		2.9
Road	Barceloneta-Quebradas.	5.7	5.7		5.7
Road	Barceloneta-Pajonal.	3.0			3.0
Road	Arecibo-Bajadero.	6.9	6.9		6.9
Road	Arecibo-Galichosa.	4.0	3.0		3.0
Road	Arecibo-Puerto.	1.7	1.7		1.7
Road	Morovis-Río Grande.	3.0	3.0		3.0
Road	Morovis-Palo Pan.	3.0	1.0		1.0
Road	Morovis-Pasto.	7.0	5.0		5.0
Road	Ciales-Hato Viejo.	3.0	1.0		1.0
Road	Ciales-Frontón.	9.0	9.0		9.0
Road	Utua-Arenas.	3.0	1.0	1.0	2.0
Road	Utua-Angelos.	1.4	1.4		1.4
Road	Utua-Vivi.	6.5	6.5		6.5
Road	Factor-Garrochales.	3.0			3.0
Road	Miraflores-Arrozal.	8.1	5.4		5.4
Road	Utua-Pajuil-Lares.	6.2	6.2		6.2
Road	Arecibo-Bda. Coll y Toste.	0.25	0.25		0.25

ASPHALTED ROADS—Continued

Road No.	Sectino	Total Length	Total Leantth Asphalted		
			Up to June 30 1942	During 1942-1943	Up to June 30 1943
Road.....	Camuy-Abrahonda.....	6.0	6.0		6.0
Road.....	Camuy-Piedra Gorda.....	3.1	3.1		3.1
Road.....	Quebradillas-San José.....	3.25	3.25		3.25
Road.....	Carretera Militar.....	8.04	8.04		8.04
Road.....	Isabela-Guerrero.....	4.5	4.5		4.5
Road.....	Isabela-Moca.....	6.0	6.0		6.0
Road.....	Isabela-Galateo.....	6.0	6.0		6.0
Road.....	Isabela-Arenas.....	3.5	3.5		3.5
Road.....	Isabela-Bda. Corchado.....	2.0	2.0		2.0
Road.....	Isabela-Galateo Alto.....	1.75	1.75		1.75
Road.....	Aguadilla-Montaña.....	6.0	6.0		6.0
Road.....	Aguadilla-Borinquen.....	4.35	4.35		4.35
Road.....	Aguadilla-Barriada Esteves.....	1.7	1.7		1.7
Street.....	De Diego & Esteves.....	1.47	1.47		1.47
Road.....	Aguadilla-Cuesta Vieja.....	1.2	1.2		1.2
Road.....	Aguada-Espino.....	1.0	1.0		1.0
Road.....	Aguada-Atalaya.....	5.8	5.8		5.8
Road.....	Rincón-Carretas.....	2.3	2.3		2.3
Road.....	Rincón-Cementerio.....	1.2	1.2		12.0
Road.....	Aguada-Naranjo.....	1.0	1.0		1.0
Road.....	San Sebastián-Saltos.....	3.5	3.5		3.5
Road.....	San Sebastián-Robles.....	3.0	3.0		3.0
Road.....	Moca-Vargas Núm. 1.....	2.5	2.5		2.5
Road.....	Moca-Isabela.....	2.0	2.0		2.0
Road.....	Moca-Barrio Cruz.....	1.65	1.65		1.65
Road.....	Moca-Cuchillas.....	1.5	1.5		1.5
Road.....	Moca-Vargas Núm. 2.....	1.0	1.0		1.0
Road.....	Las Marias-Buena Vista.....	8.0	8.0		8.0
Road.....	Las Marias-Herrerías.....	4.2	4.2		4.2
Road.....	San Sebastián-Perchas.....	6.8	6.8		6.8
Road.....	Lares-Río Prieto.....	3.2	3.2		3.2
Road.....	Lares-Espino.....	3.1	3.1		3.1
Road.....	Dominguito-Esperaza.....	5.5	5.5		5.5
Road.....	Esperanza-Bayaney.....	4.8	4.8		4.8
Road.....	Lares-Piletas.....	4.0	4.0		4.0
Road.....	Yauco-Río Prieto.....	4.2	4.2		4.2
Road.....	Lares-Río Prieto vía Collazo.....	3.5	3.5		3.5
Road.....	Quebradillas-San Antonio.....	4.2	4.2		4.2
Road.....	Añasco-Humata.....	2.0	2.0		2.0
Road.....	Añasco-Cerro Gordo.....	2.0	2.0		2.0
Road.....	Mayaguez-Sanatorio.....	2.8	4.8		4.8
Street.....	Balboa & Betances-Mayagüez.....	0.5		0.5	0.5
Road.....	Mayagüez-Leguisamo.....	9.1	9.1		9.1
Road.....	Mayagüez-Río Cañas.....	1.06	1.06		1.06
Road.....	Hormigueros-Eureka.....	2.0	2.0		2.0
Road.....	Hormigueros-Rosario.....	3.2	3.2		3.2
Road.....	San Germán-Cotui.....	1.0	1.0		1.0
Road.....	San Germán-Guamá.....	5.5	5.5		5.5
Road.....	San Germán-Minillas.....	3.0	3.0		3.0
Road.....	Sabana Grande-Machuchal.....	4.0	3.0		3.0
Road.....	Sabana Grande-Caín Alto.....	1.25	1.25		1.25
Road.....	Sabana Grande-Maricao.....	21.0			
Road.....	Sabana Grande-Hocónuco.....	6.2			
Road.....	Sabana Grande-Indiera.....	1.7			
Road.....	Cabo Rojo-Joyuda.....	7.6	7.6		7.6
Road.....	Cabo Rojo-Correccional.....	12.8	12.8		12.8
Road.....	Cabo Rojo-Guanajibo.....	3.7	3.7		3.7
Road.....	Cabo Rojo-Pedernales.....	4.0	2.0		2.0
Road.....	Boquerón-Faro.....	6.6			
Road.....	Palmarejo-Paris.....	4.7	4.7		4.7
Road.....	Palguera-Papayo.....	1.9	1.9		1.9
Road.....	Yauco-Rancheras.....	7.1	5.0		5.0
Road.....	Yauco-Barriada A. Lluveras.....	3.0			
Road.....	Rubias-Carrizales.....	5.4	1.2		1.2
Road.....	Maricao-Hatchery.....	2.0			
Road.....	Ponce-Real y Anón.....	10.6	10.6		10.6
Road.....	Adjuntas-Guilarte.....	8.6	8.6		8.6
Road.....	Adjuntas-Garzas.....	8.4	8.4		8.4
Road.....	Ponce-Tibes.....	6.0	6.0		6.0
Road.....	Guayanilla-Sierra Baja.....	6.0	6.0		6.0
Road.....	Juana Díaz-Collores.....	5.68	5.68		5.68
Road.....	Juana Díaz-Naranjo.....	5.1	5.1		5.1
Road.....	Coamo-Los Llanos.....	5.0	5.0		5.0

ASPHALTED ROADS—Continued

Road No.	Sectino	Total Length	Total Leanth Asphalted		
			Up to June 30 1942	During 1942-1943	Up to June 30 1943
Road	Peñuelas-Jaguas	5.0	5.0		5.0
Road	Jayuya-Mameyes	4.5	4.7		4.7
Road	Villalba-Semil	3.4	3.4		3.4
Road	Ponce-Pámpano	2.4	2.4		2.4
Road	Villalba-Apeadero	2.0	2.0		2.0
Road	Juana Díaz-Guayabal	2.0	2.0		2.0
Road	Cayures-Gavias	1.5	1.5		1.5
Road	Adjuntas-Vegas Arriba	1.4	1.4		1.4
Road	Jayuya-Coabey	1.0	1.0		1.4
Road	Guayanilla-Playa	0.58		0.58	0.58
Road	Guayama-Barrio Carmen	6.62	6.62		6.62
Road	Orocovis-Damian	6.3	6.3		6.3
Road	Comerio-Palomas	6.2	6.2		6.2
Road	Patillas-Barrio Real	5.52	5.52		5.52
Road	Barranquitas-Barrancas	5.38	5.38		5.38
Road	Barranquitas-Academia	0.40	0.40		0.40
Road	Barranquitas-Palo Hincado	3.0			
Road	Aibonito-Gyon	5.1	5.1		5.1
Road	Arroyo-Barrio Yaurel	5.03	4.23		4.23
Road	Aibonito-Pulguillas	5.0	5.0		5.0
Road	Cidra-Barrio Ceiba	4.2	4.2		4.2
Road	Salinas-Quebrada Yeguas	2.5	2.5		2.5
Road	Comerio-Piñas	2.4	2.4		2.4
Road	Cayey-Barrio Cedro	2.3	2.3		2.3
Road	Cayey-Guavate	12.0			
Road	Aibonito-Preventorio	1.0	1.0		1.0
Road	Aibonito-Los Llanos	0.8	0.8		0.8
Road	Patillas-Muñoz Rivera	5.5			
Road	Río Grande-Guzmán	5.8	5.8		5.8
Road	Río Grande-El Verde	7.0			
Road	Luquillo-Mameyes	7.0	3.0		3.0
Road	Luquillo-Sabana	6.5			
Road	Fajardo-Río Arriba	5.4	5.4		5.4
Road	Ceiba-Río Abajo	5.3	5.0		5.0
Road	Humacao-Antón Ruiz	8.0	8.0		8.0
Road	Humacao-Trinidad	1.0		1.0	1.0
Road	Humacao-Mariana	2.0	2.0		2.0
Road	Yabucoa-Puerto Guayanés	3.0		3.0	3.0
Road	Yabucoa-Limones	1.8		1.8	1.8
Road	Yabucoa-Camino Nuevo	2.6		1.6	1.6
Road	Fajardo-Bda. Santiago Veve	1.8		1.0	1.0
Road	Gurabo-Jagual	2.5	2.5		2.5
Road	Las Piedras-Las Torres	6.4	6.4		6.4
Road	Caguas-Barrlada Delgado	0.7		0.7	0.7
Road	Caguas-Tomás de Castro	6.1	6.1		6.1
Road	San Lorenzo-Cerro Gordo	2.0	2.0		2.0
Road	San Lorenzo-Juncos	5.9	5.9		5.9
Road	Juncos-Lirios	1.0	1.0		1.0
Road	Juncos-Valencianos-Florida	6.0	6.0		6.0
Road	Las Piedras-Montones	1.0	1.0		1.0
Road	Caguas-Bda. J. Mercado	1.8			
Road	San Lorenzo-Jagual	3.7	3.7		3.7
Road	Gurabo-Jaguas	2.5	2.5		2.5
Road	Naguabo-El Duque	3.4	2.7		2.7
Road	Naguabo-Mariana	4.2	4.2		4.2
Road	Isabel Segunda-Puerto Diablo	8.2	8.2		8.2
Road	Culebra-Flamenco	0.4	0.4		0.4
Road	Humacao-Bda. Antonio Roig	1.5	1.5		1.5
Road	Yabucoa-Juan Martín	2.8	2.8		2.8
TOTALS		2,877.08	2,738.20	18.78	2,756.98

DIVISION OF PUBLIC BUILDINGS AND MUNICIPAL WORKS

The functions of this Division include those of the former Division of Public Buildings and Division of Municipal Works, both of which were merged into one by Act No. 253 of May 14, 1942 (Insular Budget). The Division is in charge of the design, construction, repair and maintenance of public buildings belonging to the Insular Government. It is also in charge of all technical matters entrusted to the Department of the Interior, relative to the surveys, plans and estimates of projects for water supply, sanitary and storm sewerage systems, street paving, stream channels improvement, retaining walls, etc., for the municipalities as well as for the Insular Government.

Operations during the year 1942-43 were seriously hampered, if not curtailed, on account of the scarcity of building materials and of the limitations and restrictions on construction projects prescribed by the War Production Board.

The repair and maintenance of the Insular public buildings constitute one of the most important duties of this division. Owing to the fact that many of these buildings are over 200 years old it is difficult to keep them in a first class condition, specially the roofs that are deteriorating to a considerable degree.

The regular appropriation of \$125,000 made by the Insular Legislature has resulted inadequate to provide the proper maintenance of the buildings and it is recommended that it be substantially increased.

During this years the sum of \$200,000 was appropriated for the repair of public school buildings and grounds, including drainage, grading and planting, either municipal or Insular, with or without Federal aid. This amount was not sufficient to cover the total cost of repairing the school buildings according to the estimates prepared by this office and for this reason some of the works were not undertaken.

Among the works executed under this appropriation were a twelve (12) room-school building in Patillas, a six (6) room-school building in Guayama, the Guayama High School and many other school buildings which were in urgent need of repair. Some of these buildings were so seriously damaged that they were closed at the time the repair work was started.

With the amount available more than fifty-six (56) school buildings scattered throughout the Island were repaired.

There was further set aside in the Insular budget the sum of \$250,000 for the completion of school buildings in the rural and urban zones of the Island.

With this appropriation five (5) school buildings in the municipalities of Cabo Rojo, Comerío, Maricao, Naguabo and Humacao were completed by administration. In the completion of these school buildings the sum of \$75,077.33 was spent. The school buildings at Cabo Rojo, Comerío and Naguabo were partially constructed by the municipalities with the cooperation of the W.P.A. but due to lack of funds, construction was stopped before completion. This Department continued the work started until they were finally completed.

Among the duties of the division is the design and construction of new public and school buildings for which appropriations were made by the Legislature. The projects that should be mentioned for their importance are the construction of eleven (11) reinforced concrete buildings in various municipalities of the Island; the construction of twenty-seven (27) fire stations, type A, nine (9) fire stations type B, and a reinforced concrete warehouse for the Civilian Defense. These fire stations will be constructed in various towns of Puerto Rico.

The construction of an annex for the Department of Agriculture and Commerce and an addition to this very same building are projects that require special note.

The urgent need of sufficient and adequate space for installing the offices of the various Departments and Agencies of the Insular Government was an important problem that required prompt action. In view of this situation the Legislature approved Act No. 198, by which the sum of \$300,000 is appropriated and the Commissioner of the Interior is authorized to lease lands and buildings where the offices of the various Departments and Agencies of the Insular Government could be installed and to expropriate lands and buildings to carry out the purpose of that Act, and to construct buildings of a temporary nature, in case there be no available buildings suitable for lease or expropriation.

By this Act the Commissioner was also empowered to make the necessary repairs to buildings acquired, or to the buildings now occupied by offices of the Insular Government.

In carrying out the provisions of this Act the following expenditures were made during this year:

Buildings Expropriated:

(a) Blanche Kellogg Institute-----	\$150,000.00
(b) Allen No. 4 -----	56,000.00
	<hr/>
	\$206,000.00
Repair of various buildings-----	60,203.00
	<hr/>
Rental paid—Other buildings-----	3,341.00
	<hr/>
Total -----	\$269,544.00

Among the important projects entrusted to the division during this year was that providing for the construction of water supply systems in the rural districts of the Island, for which the sum of \$90,000 was appropriated by Act No. 145 of the Legislature of Puerto Rico, approved May 8, 1942.

Surveys, plans and estimates were made for the water supply systems for the wards of "Rosario" of San Germán, "Florida" of Barceloneta, "Limón" of Yabueoa, "Coto Norte" of Manatí, "Barrio Bajo" of Patillas and "Jobos" of Guayama. The project for "Limón" ward was completed during this year and work was started on those of the wards of "Maguayo" of Dorado, "Corozo" of Cabo Rojo, "Rosario" of San Germán and "Coto Norte" of Manatí.

PUBLIC BUILDINGS SECTION

PROJECTS PREPARED BY THE DIVISION OF PUBLIC BUILDINGS AND
MUNICIPAL WORKS DURING THE FISCAL YEAR 1942-1943

FIRE STATIONS

CIVILIAN DEFENSE

Town	BUILDING	Type	Funds	Estimated Cost
Aguadilla.....	Fire Station.....	B	Insular....	\$9,873.00
Arecibo.....	Fire Station.....	B	Insular....	9,873.00
Arroyo.....	Fire Station.....	A	Insular....	5,000.00
Bayamón.....	Fire Station.....	A	Insular....	5,000.00
Caguas.....	Fire Station.....	B	Insular....	9,873.00
Carolina.....	Fire Station.....	A	Insular....	5,000.00
Cataño.....	Fire Station.....	A	Insular....	5,000.00
Cayey.....	Fire Station.....	A	Insular....	5,009.00
Coamo.....	Fire Station.....	A	Insular....	5,000.00
Fajardo.....	Fire Station.....	A	Insular....	5,000.00
Guánica.....	Fire Station.....	A	Insular....	5,000.00
Guayama.....	Fire Station.....	B	Insular....	9,873.00
Gurabo.....	Fire Station.....	A	Insular....	5,000.00
Humacao.....	Fire Station.....	B	Insular....	9,873.00
Juncos.....	Fire Station.....	A	Insular....	5,000.00
Manatí.....	Fire Station.....	A	Insular....	5,000.00
Mayagüez.....	Fire Station.....	B	Insular....	9,873.00
Ponce.....	Fire Station.....	A	Insular....	5,000.00
Ponce.....	Fire Station.....	B	Insular....	9,873.00
Río Piedras.....	Fire Station.....	B	Insular....	9,873.00
Sabana Grande.....	Fire Station.....	A	Insular....	5,000.00
San Germán.....	Fire Station.....	5-A	Insular....	5,000.00
San Juan.....	Fire Station.....	5-A	Insular....	25,000.00
San Juan.....	Fire Station.....	B	Insular....	9,873.00
San Lorenzo.....	Fire Station.....	A	Insular....	5,000.00
Santa Isabel.....	Fire Station.....	A	Insular....	5,000.00
Utua.....	Fire Station.....	A	Insular....	5,000.00
Vega Alta.....	Fire Station.....	A	Insular....	5,000.00
Vega Baja.....	Fire Station.....	A	Insular....	5,000.00
Yabucoa.....	Fire Station.....	A	Insular....	5,000.00
Yauco.....	Fire Station.....	A	Insular....	5,000.00
San Juan.....	Store House for Civilian Defense.....		Insular....	9,974.00
	Total..... 27	A	\$5,000.00	\$135,000.00
	Total..... 9	B	9,873.00	88,857.00
	Store House.....			9,974.00
	TOTAL ESTIMATED COST.....			\$233,831.00

CONSTRUCTION AND COMPLETION OF SCHOOL BUILDINGS

Town	Description of Building	No. of Class Rooms	Funds	Expended During Fiscal Year 1942-43
Cabo Rojo.....	Completion of a High School Building ..	12	I.....	\$6,567.97
Comerio.....	Completion of a High School Building...	16	I.....	16,876.47
Humacao.....	Completion of a School Building Bo. Playa	2	I.....	1,067.70
Maricao.....	Completion of a School Building.....	4	I.....	4,885.30
Naguabo.....	Completion of a School Building.....	8	I.....	17,836.97
	Material & Miscellaneous Expenses.....			20,485.07
	Salaries & Transportation of Materials...			6,561.12
	Travel Expenses.....			7,796.73
				\$75,077.33
	WORK BY CONTRACT			
	LABOR & TRANSPORTATION OF MATERIALS FOR THE CONSTRUCTION OF ELEVEN SCHOOL BUILDINGS			
Villalba.....	Reinforced Concrete School Building....	1	I.....	2,000.00
	Reinforced Concrete School Building....	1	I.....	2,000.00
Añasco.....	Reinforced Concrete School Building....	2	I.....	3,550.00
Coamo.....	Reinforced Concrete School Building....	2	I.....	3,550.00
Morovis.....	Reinforced Concrete School Building....	2	I.....	3,550.00
Camuy.....	Reinforced Concrete School Building....	3	I.....	4,900.00
San Sebastián..	Reinforced Concrete School Building....	3	I.....	5,050.00
Arecibo.....	Reinforced Concrete School Building....	4	I.....	9,200.00
Manatí.....	Reinforced Concrete School Building....	4	I.....	13,600.00
Ponce.....	Reinforced Concrete School Building....	6	I.....	17,400.00
San Germán....	Reinforced Concrete School Building....	8	I.....	24,300.00
	Materials purchased for the construction of schools.....			86,222.67
	GRAND TOTAL			\$174,922.67
	GRAND TOTAL			\$250,000.00



DEPARTMENT OF AGRICULTURE AND COMMERCE BUILDING, SANTURCE.

Constructed by Force Account With Combined Insular and W.P.A. Funds.—Completed, September, 1941.
Sergio Cuevas Bustamante, Commissioner of the Interior.

APPROXIMATE VALUATION OF BUILDINGS PROPERTY OF THE
INSULAR GOVERNMENT

Town	BUILDING	Funds	Expended During 1942-43	Valuation of Building
Aguadilla.....	District Jail.....	I	\$745.66	\$35,000.00
	District Court.....	I	72.41	50,000.00
	Insular Police Barracks.....	I		10,000.00
	District Hospital.....	I		531,500.00
	Insular Telegraph Offices.....	I		5,000.00
Aibonito.....	Commissioner of the Interior..			
	Summer Residence.....	I	845.00	9,000.00
Arecibo.....	District Jail.....	I	945.55	60,000.00
	District Court.....	I	1,152.39	20,000.00
	Insular Police Barracks.....	I		15,000.00
	District Hospital.....	I		520,500.00
Barranquitas...	Muñoz Rivera Park & House.....	I	1,748.10	8,000.00
Bayamón.....	District Court.....	I	339.61	15,000.00
	District Hospital.....	I	622.06	553,800.00
Caguas.....	Insular Telegraph Offices & Police Station...	I		20,000.00
Coamo.....	Insular Police Barracks.....	I	115.00	10,000.00
Ceiba.....	Insular Telegraph Offices.....	I		2,000.00
Culebras.....	Insular Telegraph Offices.....	I		5,000.00
Guayama.....	District Jail.....	I	1,529.83	25,000.00
	District Court.....	I	391.70	50,000.00
	Insular Police Barracks.....	I	953.12	15,000.00
	Tuberculosis Hospital.....	I		30,000.00
Guaynabo.....	Insular Home for Boys.....	I	959.61	175,000.00
	Insular Police Barracks.....	I		8,000.00
Guánica.....	Insular Police Barracks.....	I		10,000.00
Humacao.....	District Jail.....	I	1,005.26	30,000.00
	District Court.....	I	63.59	50,000.00
	Insular Police Barracks.....	I		10,000.00
Mayagüez.....	Insular Police Barracks.....	I		10,000.00
	Insular Industrial School for Boys.....	I	47.12	300,000.00
	Tuberculosis Hospital.....	I		30,000.00
	Captain of the Port.....	I	53.60	10,000.00
	Insular Telegraph Office.....	I		10,000.00
Ponce.....	Castillo Building:			
	1—District Jail.....		716.05	
	2—District Court.....		986.35	
	3—Municipal Court.....	I	424.35	150,000.00
	Castillo Building Annex:			
	1—Jail for Minors.....	I		12,000.00
	2—Jailers Residence.....	I		5,000.00
	Antituberculosis Sanatorium.....	I		70,000.00
	Blind Asylum.....	I	890.27	125,000.00
	District Hospital.....	I		100,000.00
	Ana Roqué Industrial School.....	I	749.90	85,000.00
	Captain of the Port.....	I	800.74	8,000.00
	Insular Government Offices.....	I	460.23	80,000.00
	Insular Police Barracks.....	I	14.68	10,000.00
	Insular Telegraph Offices.....	I		3,000.00
Río Piedras....	Insular Hospital of Psychiatry.....	I	17,038.67	1,107,000.00
	Insular Penitentiary.....	I	228.99	800,000.00
	Antituberculosis Sanatorium.....	I	10,007.45	500,000.00
	Insular Police Barracks.....	I	611.52	8,000.00
	Residence of the Commissioner of Interior ..	I	645.67	10,000.00
San Lorenzo....	Insular Telegraph Offices.....	I		10,000.00
San Juan.....	Intendencia Building:	I		220,000.00
	1—Treasury Department.....	I	1,723.35	
	2—Auditors Office.....	I	333.53	
	National Guard.....	I		300,000.00
	Tourist Information Office.....	I		15,000.00
	Diputation Building.....	I		110,000.00

APPROXIMATE VALUATION OF BUILDINGS PROPERTY OF THE
INSULAR GOVERNMENT—Cont.

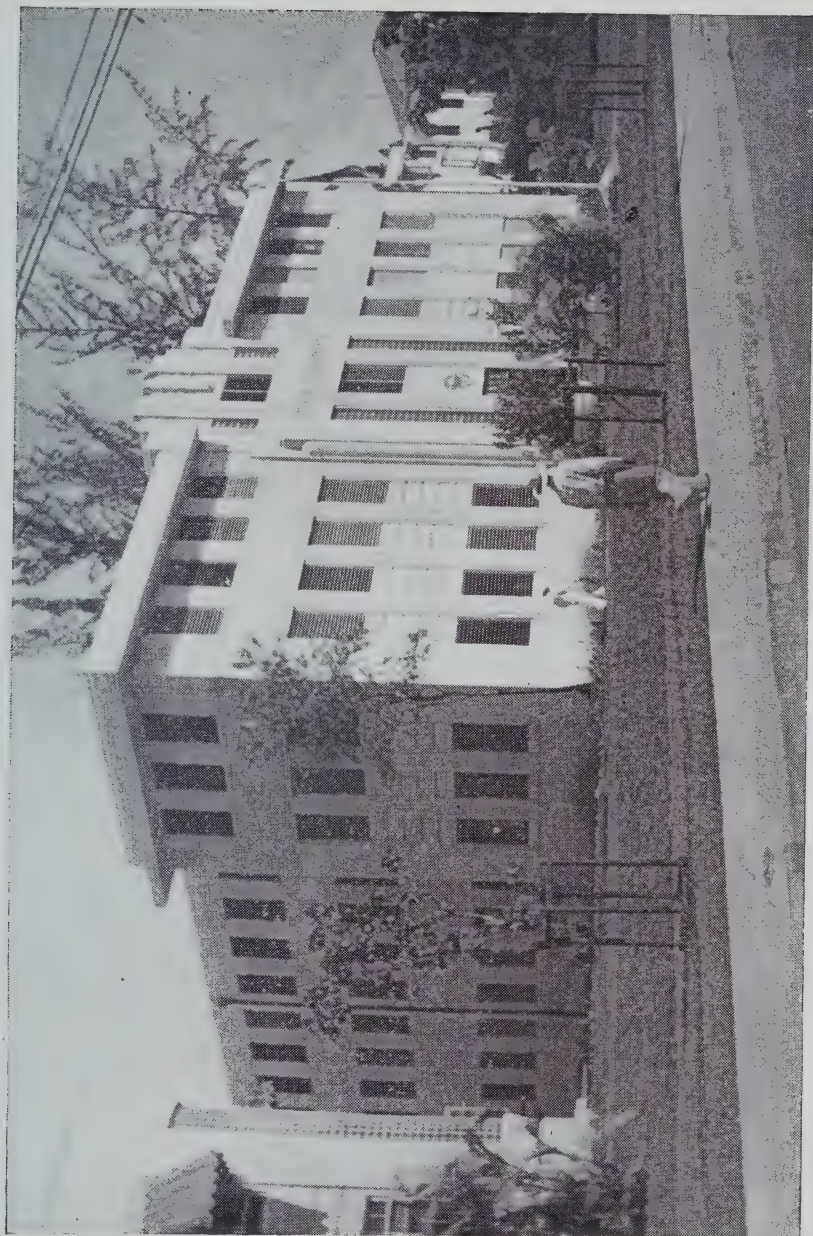
Town	BUILDING	Funds	Expended During 1942-43	Valuation of Building
	1—District Courts.....	I	4,685.78	
	2—Municipal Courts.....	I	25.04	
	3—Insular Telegraph.....	I	2,267.51	
	4—I. R. Collection Office.....	I	323.14	
	Executive Mansion.....	I	3,135.58	260,000.00
	Executive Secretary's Office—Allen No. 1.....	I	609.83	45,000.00
	Department of Justice, Allen 3.....	I	1,973.63	100,000.00
	Department of Education:			
	Allen No. 5.....	I	2,028.97	80,000.00
	Allen No. 2.....	I		45,000.00
	1—Residence of the Commissioner of Education.....	I	293.05	
	2—Residence of the Auditor of P. R.....	I	1,293.63	
	3—Residence of the Attorney General.....	I	1,629.13	
	Civil Service Offices, Allen 4.....	I		60,000.00
	Pabellón San Juan.....	I	365.14	18,000.00
	Annex to the USO Buildings.....	I		10,000.00
	1—Bureau of Mines.....	I	71.60	
	Bureau of Supplies, Printing & Transp.....	I	1,131.12	150,000.00
	Department of Labor.....	I	2,718.66	40,000.00
	Carnegie Library.....	I	804.77	75,000.00
	Hornos Militares.....	I	69.97	25,000.00
	Insular Police Barracks.....	I	200.49	20,000.00
	Insular Police Headquarters.....	I	3,583.20	60,000.00
	Insular Police Barracks, Puerta de Tierra.....	I	41.34	10,000.00
	Industrial Commission.....	I	575.46	25,000.00
	Book Storage Building (Dept. of Education).....	I		15,000.00
	District Jail.....	I	1,727.54	150,000.00
Santurce.....	Department of Health:			
	(Main Offices—Stop 19).....	I	4,379.02	160,000.00
	Insular Home for Girls.....	I	11,334.02	170,000.00
	Blind Children's Institute.....	I	2,285.73	100,000.00
	Industrial School for Blind Adults.....	I		10,000.00
	Insular Telegraph Office.....	I	211.58	1,500.00
	Insular Police Station (Stop 19).....	I	258.82	10,000.00
	Insular Police Station.....	I	736.91	10,000.00
	Department of Agriculture and Commerce—Main Bldg.....	I	2,622.97	160,000.00
	Department of Agriculture and Commerce—Laboratory Buildings.....	I		42,000.00
	Land Authority Office.....	I		110,000.00
	Department of the Interior—Stop 22½.....	I	4,700.00	178,000.00
	1—Board of Planning, Urbanizing and Zoning.....	I	2,500.00	6,000.00
	2—Board of Pension of Insular Employees.....	I	800.00	2,000.00
	Miscellaneous Expenses.....		13,359.46	
Trujillo Alto.....	Hospital for the Leper.....	I	5,904.84	200,000.00
	25 Public Health Units.....	I	859.01	275,000.00
	GRAND TOTAL.....		\$126,748.10	\$8,963,300.00

SUMMARY

	Amount expended during 1942-43
Department of Health-----	\$54,280.68
Department of Justice-----	19,104.18
Department of Agriculture and Commerce-----	2,622.97
Department of Education-----	2,294.91
Treasury Department-----	4,251.08
Department of the Interior-----	10,486.58
Executive Secretary-----	4,903.64
Insular Telegraph-----	2,479.09
Insular Police-----	6,535.08
Other Buildings-----	4,682.33
Miscellaneous Expenses-----	13,359.46
<hr/>	
Total-----	\$125,000.00
Muñoz Rivera Park and House in Barranquitas-----	1,748.10
<hr/>	
Grand Total-----	\$126,748.10

REPAIR OF PUBLIC SCHOOL BUILDINGS AND GROUNDS WITH OR WITHOUT
FEDERAL AID

Town	Description of Buildings	No. of Class Rooms	Funds	Expended During F. Y. 1942-43
WORK BY FORCE ACCOUNT				
Aguada.....	School Building.....	4	I.....	1,214.77
Aguas Buenas...	Rafael Nicolau School.....	1	I.....	2,996.89
Aibonito.....	School Building.....	8	I.....	3,832.52
Añasco.....	Ramírez de Arellano School.....	6	I.....	943.23
Arecibo.....	Bo. Bajadero School.....	4	I.....	625.67
Bayamón.....	Dunlevy School.....	6	I.....	8,359.26
Barranquitas...	School Building.....	4	I.....	2,105.23
Barranquitas...	School Building.....	2	I.....	1,229.83
Cabo Rojo.....	P. F. Colberg School.....	20	I.....	2,219.26
Carolina.....	Clemente Fernández School.....	6	I.....	884.93
Cataño.....	Dr. Figueroa School.....	14	I.....	3,872.63
Cayey.....	B. Harrison School.....	16	I.....	6,684.83
Ceiba.....	S. Iglesias School.....	4	I.....	2,163.22
Ciales.....	School Building.....	11	I.....	2,925.54
Ciales.....	Bo. Frontón School.....	6	I.....	2,481.56
Cidra.....	Muñoz Rivera School.....	10	I.....	4,612.32
Coamo.....	J. R. Rodríguez School.....	16	I.....	5,884.11
Comerio.....	Bo. Cedrito School.....	2	I.....	1,659.31
Comerio.....	Bo. Naranjo School.....	4	I.....	2,223.59
Corozal.....	Lincoln School Annex.....	6	I.....	3,087.34
Dorado.....	Jacinto López School.....	12	I.....	7,324.91
Fajardo.....	High School.....	12	I.....	1,804.93
Guayama.....	E. Derkes School.....	6	I.....	5,504.22
Guayama.....	High School.....	16	I.....	13,073.06
Gurabo.....	School Building.....	8	I.....	6,070.71
Gurabo.....	School Building.....	1	I.....	1,168.49
Hatillo.....	School Building.....	10	I.....	2,535.49
Hormigueros...	Ruiz Belvis School.....	6	I.....	578.67
Humacao.....	Antonia Saez School.....	12	I.....	5,490.48
Juncos.....	School Building.....	16	I.....	5,204.45
Lajas.....	Perry School.....	6	I.....	771.62
Lares.....	High School.....	12	I.....	2,755.25
Las Marias...	De Hostos School.....	6	I.....	1,268.17
Las Piedras...	Roig School.....	6	I.....	2,865.16
Manatí.....	Severo Quifones School.....	16	I.....	3,217.04
Maunabo.....	School Building.....	7	I.....	3,559.79
Maunabo.....	Bo. Palo Seco School.....	4	I.....	1,701.47
Moca.....	School Building.....	8	I.....	6,785.05
Morovis.....	School Building.....	6	I.....	5,644.93
Naguabo.....	Eugenio Bras School.....	12	I.....	840.27
Naranjito.....	School Building.....	12	I.....	5,957.92
Orocovis.....	Pedro Arroyo School.....	6	I.....	2,540.23
Patillas.....	School Building.....	12	I.....	6,993.52
Río Grande...	Pimentel School.....	6	I.....	2,075.57
San Germán...	Antonia Martínez School.....	6	I.....	857.84
San Lorenzo...	Muñoz Rivera School.....	10	I.....	3,537.51
San Sebastián...	Cardé School.....	6	I.....	1,105.95
Toa Alta.....	Bo. Quebrada School.....	2	I.....	582.51
Toa Alta.....	Bo. Río Lajas School.....	2	I.....	3,723.58
Vega Alta.....	José De Diego School.....	6	I.....	1,042.51
Vega Alta.....	School Building.....	6	I.....	2,832.95
Vega Baja.....	E. Padilla School.....	16	I.....	6,656.71
Vega Baja.....	Industrial Arts School.....	6	I.....	2,657.16
Yabucoa.....	Bo. Playita School.....	3	I.....	2,446.82
Yabucoa.....	Bo. Aguacate School.....	4	I.....	2,260.21
	Salaries & Miscellaneous Expenses.....			13,044.02
	Travel Expenses.....			1,150.74
	GRAN TOTAL.....			\$200,000.00



PUERTO RICO LAND AUTHORITY BUILDING, SANTURCE. — COMPLETED, DECEMBER 28, 1942.
Sergio Cuevas Bustamante, Commissioner of the Interior. Rafael Carmoega, Contractor.



DEPARTMENT OF THE INTERIOR BUILDING
SANTURCE
EAST SIDE ELEVATION

DIVISION OF PUBLIC BUILDINGS AND MUNICIPAL WORKS

59

WORK DONE DURING FISCAL YEAR 1942-1943

OTHER APPROPRIATIONS

I—Paid from Insular Funds
M—Paid from Municipal Funds
WPA—Paid from Federal Funds

Town	Description of Work	Funds	Total Expended or Obligated to Date
Lares.....	Antituberculosis Clinic.....	I.....	\$9,776.99
Bayamón.....	Construction of a Contagious Disease Hospital for the Department of Health.....	I-WPA....	69,300.00
San Juan.....	First Aid Station—Army and Navy.....	I-WPA....	10,000.00
	Total.....		\$89,076.99

WORK DONE BY CONTRACT

Town	Building	Type	Total
Aguadilla.....	Construction of a fire Station.....	B	\$11,900.00
Arecibo.....	Construction of a fire Station.....	B	11,000.00
Arroyo.....	Construction of a fire Station.....	A	4,950.00
Bayamón.....	Construction of a fire Station.....	A	5,515.00
Coamo.....	Construction of a fire Station.....	A	4,950.00
Carolina.....	Construction of a fire Station.....	A	4,515.00
Cataño.....	Construction of a fire Station.....	A	4,515.00
Cayey.....	Construction of a fire Station.....	A	3,783.34
Caguas.....	Construction of a fire Station.....	B	8,689.50
Fajardo.....	Construction of a fire Station.....	A	4,515.00
Guánica.....	Construction of a fire Station.....	A	4,950.00
Guayama.....	Construction of a fire Station.....	B	11,900.00
Gurabo.....	Construction of a fire Station.....	A	3,703.34
Humacao.....	Construction of a fire Station.....	B	8,639.50
Hato Rey.....	Construction of a fire Station.....	A	4,515.00
Juncos.....	Construction of a fire Station.....	A	3,503.34
Mayagüez.....	Construction of a fire Station.....	B	11,900.00
Manatí.....	Construction of a fire Station.....	A	4,500.00
Ponce.....	Construction of a fire Station.....	B	11,900.00
Ponce-Playa.....	Construction of a fire Station.....	B	4,950.00
Río Piedras.....	Construction of a fire Station.....	B	12,585.00
San Juan.....	Construction of 5 fire Stations.....	A	22,575.00
San Juan.....	Construction of a fire Station.....	B	12,583.00
Sabana Grande.....	Construction of a fire Station.....	A	4,950.00
San Lorenzo.....	Construction of a fire Station.....	A	3,403.34
San Germán.....	Construction of a fire Station.....	A	4,950.00
Santurce.....	Construction of a warehouse for Civilian Defense.....		15,185.00
Santa Isabel.....	Construction of a fire Station.....	A	4,950.00
Utua.....	Construction of a fire Station.....	A	4,400.00
Vega Baja.....	Construction of a fire Station.....	A	4,300.00
Vega Alta.....	Construction of a fire Station.....	A	4,500.00
Yabucoa.....	Construction of a fire Station.....	A	4,164.84
Yauco.....	Construction of a fire Station.....	A	4,950.00
	Total.....		\$237,092.20

OTHER BUILDINGS

Town	BUILDING	Fund	Estimated Cost
Santurce.....	Construction of a retention Wall for Lot Surrounding the Agriculture and Commerce Building.....	I.....	\$10,561.93
Santurce.....	Construction of an Annex for the Department of Agriculture and Commerce.....	I.....	106,645.59
Santurce.....	Construction of an Addition to the Department of Agriculture and Commerce, Fernández Juncos Avenue, Stop 19.....		87,643.00
	Total.....		\$204,850.52

MISCELLANEOUS WORKS

Description	Amount Expended 1942-1943
Continuation of the Capitol Building and purchase of its office furniture.....	\$59,876.52
Extension and improvements of Insular Properties.....	9,933.00
Expenditures incurred by the Commissioner of the Interior in the execution of certain works and equipment of public buildings.....	12,047.82
Total.....	\$81,857.34

MUNICIPAL WORKS SECTION

PROJECTS

Surveys were made and plans and estimates prepared for the following:

Description	Estimate
1. Barceloneta—Water supply system for “Florida” Ward-----	\$20,000.00
2. Dorado—Construction of deep wells for the water supply of “Maguayo” Ward-----	2,500.00
3. Guayama—Construction of a reinforced concrete tank for the water supply of “Jobos” Ward-----	3,000.00
4. Jayuya—Construction of a retaining wall along the margin of the “Río Grande” River-----	121,527.00
5. Manatí—Water supply system for “Coto Norte” Ward-----	992.00
6. Naranjito—Improvement and extension of the municipal ceme- tery-----	6,000.00
7. Patillas—Water supply system for “Bajo” Ward-----	4,500.00
8. Ponce—Improvements to the water supply system of the Indus- trial School for Girls “Ana Roqué Duprey”-----	9,500.00
9. Río Piedras—Reconstruction of a sanitary sewer branch at the Insular Insane Asylum-----	1,500.00
10. San Germán—Water supply system for “Rosario” Ward-----	24,000.00
11. San Juan—Reconstruction of the sewer at Street No. 1 on the Reclaimed Lands, Puerta de Tierra-----	10,000.00
12. San Juan—Installation of a 4” diameter pipe line for the water supply of the Insular Capitol-----	4,000.00
13. San Juan—Extension of the sewage system of the Muñoz Rivera Park, Zone of the “Escambrón”-----	3,000.00
14. Yabucoa—Extension of the water supply system to “Limón” Ward-----	997.50
14 Projects with estimates amounting to-----	\$211,516.50

Preliminary plans and estimate amounting to \$3,421,000.00, were prepared for improvements in the wards of “Fanguito,” “Hoare,” “South Section of Barrio Obrero,” in Santurce, and “South Section of Cataño”.

Projects prepared by private engineers and the municipalities examined for approval in this Division:

Description	Estimate
1. Aguadilla—Street improvement-----	\$61,767.00
2. Caguas—Reconstruction and paving of streets-----	120,000.00
3. Guayanilla—Municipal road to "Boca" Ward-----	13,000.00
4. Ponce—Street paving and construction of storm sewers-----	53,397.60
5. Río Piedras—Widening and paving of Arsuaga, Brumbaugh and Georgetti Streets-----	36,300.00
6. San Juan—Waterworks facilities—Contract No. 1—Furnish- ing concrete pressure pipe-----	1,037,343.25
7. San Juan—Waterworks facilities—Contract No. 2—Distribu- tion reservoir-----	252,615.00
8. San Juan—Sanitary and storm sewers in Loíza Street, San- turce-----	70,000.00
9. San Juan—Waterworks facilities—Contract No. 4—Laying of pipe "A"-----	154,110.00
10. Toa Baja—Street paving and construction of wall and gutter at "Palo Seco" Ward-----	10,597.94
11. Toa Baja—Street paving and construction of curbs and side- walks-----	13,654.21
11 Projects with estimates amounting to-----	\$1,822,785.00

CONSTRUCTION WORKS

CONTRACTS AWARDED IN PRECEDING YEARS AND COMPLETED DURING THIS YEAR

No.	Description	Contract Price	Paid this Year	Total Cost
1.....	San Juan—Construction and installation of a sewage treatment plant south of Santurce.....	\$164,864.00	\$4,337.19	\$171,157.96
2.....	San Juan—Installation of pump driven by electric motor in Guaynabo, for the water supply system.....	39,606.25	6,205.00	44,485.25
2.....	CONTRACTS WITH TOTALS OF.....	\$204,470.25	\$10,542.19	215,643.21

CONTRACTS AWARDED IN PRECEDING YEARS AND CONTINUED DURING THIS YEAR

No.	Description	Estimate	Contract Price	Paid This Year
1.....	Carolina—Construction of two deep wells for the water supply system.....	\$7,500.00	\$8,000.00	.....
2.....	Las Marías—New water supply system.....	8,500.00	8,300.00	.....
3.....	San Juan—Construction of a new electric light- ing system for the "Barceló" Public Square at the Workmen's Settlement (Barrio Obrero) Santurce.....	3,000.00	2,948.28	.....
3.....	CONTRACTS WITH TOTALS OF.....	\$19,000.00	\$19,248.28	.....

CONTRACTS AWARDED DURING THIS YEAR AND UNDER WAY AT THE
END OF THE YEAR

No.	Description	Estimate	Contract Price	Paid This Year
1.....	Aguadilla—Street improvement.....	\$26,100.00	\$23,660.00	.....
2.....	Cabo Rojo—Construction of deep wells for the water supply of "Corozo" Ward.....	2,500.00	3,800.00	.....
3.....	Dorado—Construction of deep wells for the water supply of "Maguayo" Ward.....	2,500.00	4,500.00	.....
4.....	San Juan—Waterworks facilities—Contract No. 1—Furnishing concrete pressure pipe.....	982,243.00	888,921.00	.....
5.....	San Juan—Waterworks facilities—Contract No. 2—Construction of distribution reservoir.....	252,615.00	188,025.00	.....
5.....	CONTRACTS WITH TOTALS OF.....	\$1,265,958.00	\$1,108,906.00	.....

The following works were performed by force account:

Description	Expended this year
1. Cabo Rojo—Water supply system (minor items)-----	\$190.97
2. Hatillo—Construction of deep wells for water supply of "Pajuil" Ward-----	1,063.14
3. Jayuya—Retaining wall along the margin of "Río Grande" River-----	8,983.42
4. Moca—Water supply system -----	18,513.47
5. Ponce—Improvement of water supply system at Industrial School for Girls "Ana Roqué Duprey"-----	8,000.00
6. Río Piedras—Reconstruction of sewer at Insane Asylum-----	1,229.59
7. San Juan—Laying of 4" pipe line for the water supply of the Capitol Building-----	3,346.12
8. San Germán—Water supply system for "Rosario" Ward-----	1,843.75
9. Villalba—Water supply system-----	997.07
10. Yabucoa—Water supply for "Limón" Ward-----	997.50
Total expended in works by force account-----	\$45,165.03

ADMINISTRATIVE WORK

- (a) Handling of 265 disbursement vouchers and supporting documents amounting to \$29,242.81.
- (b) Reports on 203 municipal ordinances.

BUREAU OF PUBLIC LANDS, ARCHIVES AND AERIAL MAP

The Bureau of Public Lands and Archives is in charge of the survey, control and leasing of lands belonging to The People of Puerto Rico, which originally belonged to the Crown of Spain and were ceded by the Government of the United States to the Insular Government to be administered for the benefit of The People of Puerto Rico and also of those properties acquired through adjudications for non-payment of taxes.

It has charge also of the old Spanish archives relating to lands, waters, forests, mines, harbors, concessions, public works and improvements.

This Division has under its care two hundred twenty-five properties located in various municipalities of the Island which have been acquired for non-payment of taxes.

Fifteen farms belonging to the Insular Government were leased to private parties during this fiscal year; the annual rental derived therefrom amounted to \$926.42.

In this fiscal year 576 infractions to the slum prevention act were reported of which 516 cases were friendly settled after the infractors removed their houses from the public lands and 58 cases were brought up before the municipal courts of which nine of them were dismissed.

The following tracts of land were surveyed and plotted on the ground:

Tract of land acquired for the Department of the Interior of Puerto Rico at Santurce.

The old railway track zone from Río Piedras to Caguas which was acquired from the Puerto Rico Railway, Light and Power Co.

The parcel of land that comprises the municipal district of the town of Luquillo and adjacent farms with a total area of 559.26 cuerdas.

Three tracts of land to be ceded by the People of Puerto Rico to the municipal government of Río Piedras.

A tract of land acquired from the White Star Bus Line.

A tract of land acquired for the Juvenile Home for Delinquent Minors at Río Piedras.

A tract of land acquired at Río Piedras for a stone quarry.

Topographical maps were prepared of the following lands:

Lot occupied by the Departments of Health and Agriculture of Puerto Rico at Santurce.

Municipal square and surrounding streets at Mayagüez.

Part of the Buena Vista Laborers Settlement at Río Piedras.

The maritime zone was surveyed and its limits were plotted on the ground adjoining the following farms:

Farm "Isidora" property of Godreau estate in ward Arenales of Salinas.

Farm property of Clemente Rodríguez Carlo and Quiñones estate at Guánica.

Farm property of Angel Villamil at Santurce and Marcos T. Caneja at Guaynabo.

The maritime zone adjacent to the insular road Ponce-Guayama and between Km. 167 and 169 of said road was surveyed.

The zone to be occupied by the widening of Loíza Street at Santurce was plotted on the ground.

FOR NATIONAL DEFENSE PURPOSES

A tract of land of 305 cuerdas was surveyed at the municipality of Fajardo for the establishment of a civilian airport.

A tract of land of 15 cuerdas in ward Monacillos of Río Piedras was surveyed to be used as a military cemetery.

Ten plots were rented to the United States of America at Puerta de Tierra and Santurce for an annual rental of \$1.00 each, to be used for naval and military purposes.

MISCELLANEOUS

Forty-one deeds were prepared for the acquisition and conveyance of lands of the People of Puerto Rico.

This Division informed 1344 cases in regard to private parties and 255 applications for dominion or possession titles filed in the District and Municipal Courts of the Island, which were forwarded by the Attorney General to this office for information and study.

Fees collected for certified copies of public documents of these archives issued by this Division to private parties amounted to \$14.45.

Computations and preparations of plans and description by metes and bounds of a farm of 101 cuerdas bought by the Department of Agriculture of Puerto Rico for forest service purposes at San Germán.

Pursuant to an act of the Legislature of Puerto Rico entitled "An Act to authorize the Commissioner of the Interior to sell to poor families the mangroves in the southern portion of the town of Cataño" approved in the year 1925, ten titles of conveyance of lots have been expedited to persons that have reclaimed and improved them.

LANDS GRANTED AND LEASED FOR THE NOMINAL RENT OF ONE DOLLAR PER YEAR BY THE PEOPLE OF
PUERTO RICO TO THE GOVERNMENT OF THE UNITED STATES OF AMERICA IN ORDER TO COOPERATE
WITH THE WAR EFFORT

No.	Area	Location Municipality	Act Authorizing the Cession	Date of Deed	Valuation
1.....	276.436 eds.....	Culebra Island.....	133-May 10, 1938.....	March 16, 1939.....	\$50,000
2.....	87.00 eds.....	Monito Island.....	36-April 14, 1940.....	May 27, 1940.....	2,610.00
3.....	360.00 eds.....	Desecheo Island.....			10,800.00
4.....	18,152.08 sq. mts.....	Marina, San Juan.....	87-April 29, 1940.....	November 29, 1940.....	272,261.20
5.....	110,077.04 sq. mts.....	Pta de Tierra, San Juan.....	67-April 25, 1940.....	July 3, 1940.....	1,651,155.60
6.....	293.24 acres.....	Isia Grande, San Juan and Santurce.....	32-April 19, 1939.....	November 7, 1939.....	11,866,836.30
7.....	1,630.58 acres.....	Around Bay of San Juan.....	66-April 25, 1940.....	Oct. 14 & Nov. 20/40.....	489,174.00
8.....	3.767 acres.....	Cataño.....	66-April 25, 1940.....	September 25, 1941.....	1,130.10
9.....	1.645 acres.....	Pta. de Tierra, San Juan.....	168-May 13, 1941.....	December 18, 1941.....	99,856.50
	5.27 acres.....	Maricao.....	Friendly condemnation proceedings.....	March 6, 1941.....	158.10
		TOTAL.....			\$14,444,001.80

About twenty parcels of land, at different localities of the Island, were leased on the nominal rental of one dollar per year.

STATEMENT SHOWING LANDS BELONGING TO THE PEOPLE OF PUERTO RICO
LEASED BY THE COMMISSIONER OF THE INTERIOR WITH THE APPROVAL
OF THE EXECUTIVE COUNCIL, DURING THE FISCAL YEAR 1942-1943

Lessee	Municipality	Area	Rent
Gobierno de la Capital.....	San Juan.....	336.00 sq. mts.	\$1.00
Ana R. Vda. Arroyo.....	Mayagüez.....	128.00 sq. mts.	10.40
Miguel Santiago.....	San Juan.....	603.67 sq. mts.	96.80
Miguel Santiago.....	San Juan.....	296.00 sq. mts.	47.20
Miguel Santiago.....	San Juan.....	288.83 sq. mts.	27.20
Miguel Santiago.....	San Juan.....	226.20 sq. mts.	72.38
Ricardo Olivero.....	San Juan.....	148.46 sq. mts.	35.63
Elisa Romero.....	Mayagüez.....	600.00 sq. mts.	72.00
Arturo Rivera.....	Mayagüez.....	108.37 sq. mts.	6.40
Josefina Cuevas.....	Mayagüez.....	145.95 sq. mts.	28.80
Gilberto Jiménez.....	Mayagüez.....	186.05 sq. mts.	14.88
Maria Luisa Cedó.....	Mayagüez.....	330.00 sq. mts.	26.40
Eusebio Alvira.....	Río Piedras.....	130.96 sq. mts.	73.33
Bernardo Pabón.....	Cabo Rojo.....	150.00 sq. mts.	12.00
Bernabé Díaz.....	Guayama.....	00.50 cuerdas.	2.00
Total.....			\$526.42

AERIAL TOPOGRAPHIC SECTION

During this Fiscal Year 1942-43, the Aerial Topographic Map Office has worked in cooperation with the U. S. Geological Survey doing field and office work.

This Office has also cooperated with Federal and Insular Government Agencies by furnishing aerial pictures, topographic maps, photographic mosaics, and with all the control data that we have available. This cooperation, however, has been given in compliance with the restrictions issued by the War Department.

FIELD WORK

Field Completion Surveys:

These have been carried out on twenty five different quadrangles, of which seventeen have been completed.

Topography:

974.4 square miles on 25 quadrangles----- \$29,794.13

OFFICE WORK

Sale of serial photographs, mosaics, etc.----- \$187.58.

FINANCIAL STATEMENT

Balance on June 30, 1942 -----	\$281.11
Sales -----	187.58
Total -----	<hr/> \$468.69
Expenses in material and equipment -----	85.12
Balance on June 30, 1943 -----	<hr/> \$383.57

AUTOMOBILE AND TRAFFIC BUREAU

The Automobile and Traffic Bureau operates under the provisions of Act No. 55, approved April 27, 1942, as subsequently amended by Act No. 119 of May 12, 1943. The amendment, however, will not take effect until August 12, 1943. The above-mentioned Act No. 55 repeals all the automobile laws previously enacted.

The purpose of the law is to regulate the use of motor vehicles in Puerto Rico, and to regulate traffic on highways. The Bureau is entrusted with the issuance of licenses to motor vehicles and to drivers and chauffeurs thereof, and to carry out all other work in connection with said activities.

Income:

In accordance with Act No. 143 of May 15, 1937, as subsequently amended, the revenues collected from the fees for vehicle and driver licenses are credited to the trust fund known as the "Special Fund for the Survey, Construction and Maintenance of Highways, Roads, and Bridges". During the fiscal year 1942-43 the amount of \$889,168.48 was collected.

The following table shows the sources of income:

DISTRIBUTION OF REVENUES

Source of Income	Number	Amount
Automobile Licenses and Number Plates.....	28,155	\$821,598.61
Dealer Licenses.....	9	900.00
Duplicate Ownership Licenses.....	190	190.00
Duplicate Number Plates.....	840	840.00
Automobile Transfers.....	6,084	6,084.00
Applications for Drivers Examination.....	2,441	12,205.00
Applications for Drivers Re-examination.....	1,718	1,718.00
Chauffeur and Operator Licenses.....	2,816	10,374.00
Duplicate Driver Licenses.....	940	940.00
Licenses for Non-resident Operators.....	147	251.00
Learner Permits.....	4,444	7,566.00
Private cars converted into Public Carriers.....	1,801	26,501.87
Total Income During the Year 1942-43.....		\$889,168.48
Total Income During the Year 1941-42.....		960,265.81
Decrease.....		\$71,097.33

Car Registration:

The total number of vehicles registered during the fiscal year totaled 28,155 as compared with 32,195 during the previous year, showing a decrease of 4,040 vehicles.

The following table shows the number of licenses for motor vehicles issued under the various denominations:

Private passenger cars-----	13,702
Public passenger cars-----	2,809
Insured public passenger cars-----	2,762
Commercial Motor Vehicles-----	3,097
Heavy Motor Vehicles-----	3,597
Heavy Public Motor Vehicles-----	1,596
Motoreycles-----	218
New car registrations-----	374
Total-----	28,155

It is noticeable that only 374 new cars, including, commercial vehicles, were registered as compared with 3,833 registered during the preceding fiscal year. The large decrease of 3,459 is easily explained by the fact that no new cars have been manufactured since December 1942 and to the freezing order of the Federal Government which requires priorities for purchase of new cars.

During the fiscal year the Commissioner of the Interior with the cooperation of the Insular Police cancelled licenses and confiscated number plates of motor vehicle having private service licenses but engaged in the transportation business. As a result 1,801 cars were compelled to secure public service licenses.

Driver Licenses:

During the present fiscal year 4,159 applications for driver examinations were filed. Of those examined 1,519 failed and 2,449 passed. During the year, 4,230 driver licenses were issued to chauffeurs, operators, and heavy motor vehicles operators. There were issued 4,444 learner permits. In the previous year, there were issued 6,389 driver licenses and 17,277 learner permits, showing a decrease of 2,154 and 12,833 respectively.

MISCELLANEOUS ACTIVITIES:

Frequently, applications are made for certificates as to motor vehicle ownership, or chauffeurs' personal records for presentation before a Court of Justice, the Public Service Commission or other Governmental Agency.

A fee of \$1.50 is charged in Internal Revenue Stamps for each certificate, of which 640 were issued, producing an income of \$960.00. For the registration of each conditional sale contract a charge of 50¢ in Internal Revenue Stamps is made. The amount of \$170.50 was collected for 341 registrations.

The amount collected from these fees is credited to the general funds of the Insular Treasury.

Statistics:

Before the fiscal year 1937-38, the funds collected from the fees for automobile licenses and driver examinations were deposited in the general funds of the Insular Government. Starting that year, the law provides that the money so collected, as well as that from the gasoline tax, shall be deposited in the Special Fund for the Survey, Construction and Maintenance of Roads, Highways and Bridges.

The following table shows the average fees and taxes collected for each motor vehicle as well as the average annual consumption of gasoline.

Fiscal Year	Average Fees Per Passenger Car	Average Fees Per Commercial Vehicle	Average Annual Gasoline Consumption Per Motor Vehicle	Average Gasoline Tax Per Motor Vehicle
	(Dollars)	(Dollars)	(Gallons)	(Dollars)
1937-38.....	25	42	1,359	95
1938-39.....	25	39	1,242	87
1939-40.....	22	37	1,314	92
1940-41.....	23	32	1,071	75
1941-42.....	22	38	1,200	84
1942-43.....	29	38	1,414	99

The above table shows a decreasing trend in all values up to the year 1940-41, and an increasing trend thereafter.

The year 1940-41 marks the minimum average annual consumption of gasoline per vehicle. This may be attributed to the fact that the gasoline reserves in the Island had been reduced by the effect of the war on the shipments of gasoline to the petroleum companies operating in the Island. Furthermore, the Island became a distribution center in the Caribbean and a great proportion of the incoming gasoline was exported, the amount remaining for public consumption being considerably reduced.

The year 1942-43 shows an average annual consumption of gasoline per vehicle higher than in preceding years when no rationing existed. This apparent anomaly is probably due to the fact that private touring cars have decreased in number while the proportion of trucks, busses, and other heavy vehicles have increased. It is

known that the average gasoline consumption of the heavy vehicles is much higher than that of touring cars and, therefore, the weighted average has been affected as shown.

Insurance of Public Automobiles:

Act No. 33 of April 14, 1941 provided, for the first time in the history of this Bureau, for the insurance of the public automobiles considered as the working tools of their owners.

The total fee for these automobiles is \$30.00, of which \$1.00 shall be considered as the payment for the license and the remaining \$29.00 as a premium on an insurance policy covering accidents caused to passengers traveling thereon and to third persons.

During the first year of the establishment of this insurance, 2,044 public automobiles were insured. During the fiscal year 1942-43, a total of 3,100 public cars were insured. The risks covered by the policy have been increased gradually by the Insurance Company due to the relatively small number of accidents and to the efforts of the Commissioner of the Interior and the Supply Committee of the Insular Bureau of Supplies.

During the year 1941-42, the public liability risks assumed were \$2,000.00 for one person in one accident and \$4,000.00 for the limit of 10 persons in one accident. The risks to be covered in the following fiscal year of 1943-44 will cover \$5,000.00 for one person in one accident and \$10,000 for the limit of 10 persons in one accident. The total premium paid by the Treasurer of Puerto Rico to the United States Casualty Company, for the general policy, amounted to \$82,252.00 for the fiscal year 1942-43.

Only 140 accidents of the public insured automobiles were reported and, correspondingly, the same number of claims for compensation were filed with the Surety Company.

Act No. 55 of 1942 establishes that, in order to have the benefits of the insurance, the owner must drive his own car. However, the same law provides that the Municipal Judges and the Justice of the Peace, may issue temporary permits to other authorized persons to drive these vehicles in case of illness of their owners and the Commissioner of the Interior is empowered to grant an extension to such permits upon written request of the owner.

Distribution of Vehicle Licenses:

By reason of the experience in the distribution of vehicle licenses at the end of the fiscal years in the past, a new system was developed to improve the service to the public and to expedite the work. In

establishing the new system; unforeseen conditions prevented it from working as smoothly as it had been conceived. It was found that the office for the rationing of gasoline suspended the allowance to all public carriers that had not obtained their licenses for the new fiscal year. The number of people affected by this rule was considerable and they agglomerated at the main office of the Department of the Interior demanding that their cases be solved expeditely. Additional measures were taken to satisfy the public and the problem was solved satisfactorily. The new system proved to have certain advantages over the old one and is subject to some improvements which will be applied on the next occasion. It is fitting to acknowledge the effective cooperation that the entire personnel of the Department of the Interior offered this Bureau in the distribution of the licenses.

BUREAU OF MINES

Appropriation:

The funds appropriated for the Bureau of Mines in the General Budget for the fiscal year just ended, were \$45,000. Of this amount, \$15,700 were spent for salaries and \$29,300 for field work, investigations, and general expenses.

Work Done by the Bureau:

The work of the Bureau has been carried on in the following fields during the past year:

1. Educational Activities
2. Visits of Inspection
3. Mining Development and Exploration Work
4. Metallurgical and Chemical Laboratories
5. Work on Ceramic Products
6. Mining Holdings
7. Surveying and Mapping
8. Mining Law
9. Salvaging of Used Metals
10. Coordination Program

Educational Activities:

Our school program has been going on uninterruptedly during the year and numerous mineral and rock collections were distributed among the teachers and students.

The mineral exhibition has been almost completed and contains over 70 specimens of rocks and minerals, over 30 specimens of fossils, and nearly 30 pieces of ceramic artistic objects.

Dissemination of knowledge and information to outside quarters was also intensified.

Visits of Inspection:

The Mining Engineer visited numerous places, both for inspection of work and for obtaining samples. A set of samples was obtained early in the year for the continental concern Messrs. North and Meissner, upon request of the Governor of Puerto Rico and in relation to sands and other substances to be used in the manufacture of glassware. Samples of dolomitic limestone were also obtained with the object in view of supplying magnesium as an important ingredient in the glass batch.

An inspection of the gypsum prospect near Ponce was done in mid-February, but with discouraging results. The purpose was to supply gypsum to the Ponce Cement Corporation.

By far the greatest part of the time dedicated to this activity was used on the manganese development project at Adjuntas.

Late in the year Mr. John Van Nostrand Dorr, of the Geological Survey, Washington, D. C., made a reconnaissance of the manganese deposits of the Island. Inasmuch as his findings coincide substantially with our Mining Engineer's report, we shall limit our comment to Mr. Dorr's conclusion.

According to his report, which is however confidential in its details, the manganese situation promises very little for the present, although it is a potential source of some labor absorption in any local relief project.

Mine Development Work:

Development work was confined to the Adjuntas manganese prospect.

The technical report on the findings is available in our files.

The administrative facts follows:

An amount of \$6,935.88 was spent for salaries; an amount of \$2,200 was spent for equipment.

In view of the unfavorable report from Mr. Dorr, it is recommended herein that no mineral concessions on manganese be granted until the situation is better clarified, especially in relation to the Mining Law and Regulations in force.

Laboratories:

The number of inquiries and requests for identification, classification, examination and analyses of rocks and minerals, was somewhat larger than on previous years.

During the year only one petition for the registration of a mining holding was brought before the Bureau. The petitioner was Mr. Luis Sagrañes, Caguas, Puerto Rico. The mining holding was located on lands of Sucesión Gatti, Bo. Garzas, Adjuntas, Puerto Rico.

Collection of Used Metals for the War Effort:

One of the most important contributions to the war effort done by the Department of the Interior during the last year was the participation of the Bureau of Mines in directing the drive for the collection of scrap metals.

The tangible result of our effort was the shipment to the States of 6,000 tons of scrap steel. The Bureau had in this activity the valuable cooperation of the W.P.A., which spent \$16,000 for the transportation of the material; the Department of Education, which supervised the drive on the rural areas; the American Legion; the Insular Council of Boy Scouts; the Office of Civilian Defense; the Department of Justice; and outside private business represented by Mr. C. J. Schaer, Manager of the Chase National Bank.

Coordination Program:

The Acting Director of the Bureau of Mines in his capacity of Coordinator of Mines for Puerto Rico, has certified to the War Production Board a total of 12 mining enterprises, including sand and gravel operations, limestone and other quarries, salt work operations and prospecting enterprises. A serial number has been obtained for each certified firm. This serial number entitles operators to the highest priority rating obtainable on the Island.

The work along this line has not been as satisfactory as might be expected, chiefly on account of the fact that quarries and sand and gravel operations are still outside of the Bureau's jurisdiction. It is emphatically recommended that such operations be placed by law under the Bureau of Mines' jurisdiction.

STATISTICS AND OTHER SERVICES

On request of the Governor of Puerto Rico, the office made a detailed study of the regulations for the control of explosives and their ingredients in time of war or national emergency, under Act No. 381, 77th Congress, Dec. 26th, 1922. As a result of our recommendations the Federal Bureau of Mines appointed all District Judges of Puerto Rico as authorized agents for the issuance of licenses. Other phases of the regulations are administered thru this office.

For the use of the Federal Bureau of Mines, statistics, both confidential and public were gathered during the fiscal year on the production of stones and sands.

THE BUREAU OF DOCKS AND HARBORS REPORT FOR THE FISCAL YEAR ENDING JUNE 30TH 1943

Collections in all ports of the island of Puerto Rico amounted to \$95,740.75 of which \$59,000.36 were collected at San Juan Harbor.

Compared with last year's collections the amount of \$95,740.75 is \$12,995.40 less. Nevertheless, San Juan Harbor produced \$908.76 more than last year, which shows that reduced activities severely affected collections in other island ports.

Tonnage and Vessels:

A total of 541 vessels (369 steamers, 172 sails) with a gross tonnage of 1,530,947 tons entered the port of San Juan. This shows a decline of 1,046,236 gross tons (128 vessels of all types) as compared to last year's entries.

This year 1,090 vessels with a tonnage of 3,024,415 tons arrived at the different ports of the island as compared to 1,758 with a tonnage of 6,820,705 for last year.

While fifty six per cent less tonnage was registered revenues paid for docking is only nine per cent less than the previous year.

Reasons for this difference are:

(1) Charges are based on mooring days and not on unloading or loading operation periods.

(2) The New York and Puerto Rico Steamship Company paid harbor dues for the first time in fourteen years on ships docking at San Antonio Dock, Puerta de Tierra. A legal claim of \$95,814.96 covering the fourteen year's dues is under consideration.

(3) The United States War Shipping Administration at Washington was notified that United States Navy and Army Transports on loading or unloading operation duties for private concerns taking sugar or any other merchandise to or from the Mainland was liable to pay docking charges to our government. Our opinion was sustained by the War Shipping Administration at Washington and orders were passed to all of their agents in the island of Puerto Rico to pay such harbor fees.

Franchise Taxes:

Franchise taxes collected from the different companies dealing in fuels were badly reduced and only \$2,797.02 on 297,702 tons of gasoline, kerosine, diesel and fuel oil were collected.

Pilots and Ships:

One of the duties of our organization is to move safely in and out all vessels arriving at the ports of the island. Ten pilots supervised by ten Captains of the Ports handle this important work. Out of 3,024,415 tons of shipping moved our pilots handled 2,875,390 tons, there occurring only one accident, at the Guayanilla Harbor, where the heavy steamer "Jane Long" was grounded while leaving the port heavily loaded with sugar.

COLLECTIONS AT THE SEVERAL PORTS OF THE ISLAND DURING THE FISCAL YEAR 1942-43

Month	San Juan	Ponce	Mayaguez	Arecibo	Aguadilla	Guánica	Guayanilla	Arroyo	Humacao	Fajardo	Total
1942											
July.....	4,517.81	786.17	1,049.51	17.50			284.52	138.08	222.50	811.53	7,827.62
August.....	4,369.37	947.36	510.06			553.61	53.99			332.35	6,766.74
September.....	5,644.10	373.89	668.92			281.60		409.00		353.61	7,731.12
October.....	5,626.47	482.62	333.47		.25	563.20	267.66	225.28		1,313.91	8,815.16
November.....	4,795.91	758.46	823.63		.25	525.56	304.78	506.88	5.00	434.90	8,156.40
December.....	5,221.79	1,421.39	886.41		.25	823.61	220.25	788.50		1,298.36	10,660.56
1943											
January.....	5,608.84	577.63	696.17			195.34	203.16	281.60	217.50	785.89	8,566.13
February.....	3,216.51	199.33	560.30			35.08	203.55	271.52		337.30	4,843.68
March.....	3,584.59	207.63	676.40			204.76	319.99	252.77		601.48	5,847.62
April.....	5,044.99	372.23	379.52			144.24	53.47	202.60	6.50	5.00	6,208.35
May.....	3,954.19	1,169.25	409.92			385.19	143.46	232.19		590.36	6,894.26
June.....	7,415.79	1,632.81	1,449.68			794.03	209.73	777.17		844.90	13,424.11
Total.....	59,000.36	9,224.10	8,745.88	17.50	.75	4,541.22	2,264.26	4,085.59	451.50	7,709.59	95,740.75

NUMBER AND TONNAGE OF THE VESSELS ARRIVED AT THE SEVERAL PORTS OF THE ISLAND, DURING THE FISCAL YEAR ENDING
JUNE 30, 1943

	San Juan		Ponce		Mayaguez		Arecibo		Aguadilla	
	Num- ber	Gross Tonnage	Num- ber	Gross Tonnage	Num- ber	Gross Tonnage	Num- ber	Gross Tonnage	Num- ber	Gross Tonnage
AMERICAN:										
Steamers.....	249	1,281,340	58	297,089	39	200,130				
Sailing Vessels.....	32	2,948	19	1,603	1	96				
FOREIGN:										
Steamers.....	120	233,809	22	58,769	89	57,300			3	54
Sailing Vessels.....	140	12,850	19	1,163	86	8,238				
Total.....	541	1,630,947	118	358,629	215	265,764			3	54

	Guánica		Guayanilla		Arroyo		Humacao		Fajardo	
	Num- ber	Gross Tonnage	Num- ber	Gross Tonnage	Num- ber	Gross Tonnage	Num- ber	Gross Tonnage	Num- ber	Gross Tonnage
AMERICAN:										
Steamers.....	25	109,225	73	163,194	35	120,962			31	167,727
Sailing Vessels.....	1	29	35	1,308						
FOREIGN:										
Steamers.....	10	8,016			6	12,253			2	13,716
Sailing Vessels.....	1	82		148					1	148
Total.....	37	117,352	108	164,650	41	133,215			34	181,591

SAN JUAN HARBOR BOARD

ANNUAL REPORT 1942-43

The San Juan Harbor Board was created by the Legislature of 1912 to supervise the construction of extensive improvements in San Juan Harbor and also the operation and maintenance of the same. The Commissioner of the Interior who is the chairman of the board and the City Manager are ex-officio members. Three other members are appointed by the Governor with the advice and consent of the Senate.

The San Juan Harbor Board manages and operates the bulkhead wharves between Piers 1, 2, 3 and 5, and also Piers 6, 12 and 13. All revenues derived from said piers and wharves are deposited in the "Wharf and Harbor Fund" to meet the expenses for operation and maintenance thereof and for such other harbor improvements as may be necessary.

The board held five regular and one special meeting during the year for the transaction of necessary business.

The following statement shows the receipts and disbursements made during the year just ended:

WHARF AND HARBOR FUND, TRUST FUND

BALANCE AS OF JUNE 30, 1942.....			\$175,414.46
RECEIPTS FROM PIER NO. 6:			
Wharfage.....	\$35,442.07		
Storage.....	7,615.41		
Demurrage.....	1,146.10		
Mooring.....	7,621.45		
Water.....	2,576.50	54,401.53	
RECEIPTS FROM PIER NO. 12 AND 13:			
Wharfage.....	\$46,271.19		
Storage.....	5,81.71		
Demurrage.....	227.44		
Mooring.....	7,670.07		
Water.....	1,604.80	61,055.21	
OTHER INCOME:			
Lease of various properties.....		\$4,507.87	
Dragline and shovel rent.....		2,325.00	
Dragline and shovel rent.....	\$1,510.00		
Dragline and shovel rent, Auditor's Receipt No. 2365..	420.00		
Dragline and shovel rent.....	500.00		
Auditor's Receipt No. 5158.....	281.14		
Auditor's Receipt No. 6395.....	30.90		
Auditor's Receipt No. 207.....	69.90		
Auditor's Receipt No. 821.....	130.00		
Auditor's Receipt No. 62.....			2,941.94
Truck service.....		400.00	
Fire pumper service.....		923.87	
Light service.....		115.97	
Miscellaneous.....		393.01	
For repairing damages.....		159.33	124,281.79
Repayment by private piers.....			2,005.08
Balance by the Special Disbursing Officer.....			670.11
Balance by Special Disbursing Officer (Petty Cash)....			250.00
Total.....			\$305,563.38
DISBURSEMENTS:			
Engineering Division:			
Salaries.....	\$14,804.94		
Wages.....	719.24		
Materials.....	381.42		
Office supplies and Miscellaneous.....	580.00		
Unexpendable property.....	19,645.06	36,130.66	
PIERS 6, 12 AND 13:			
Salaries.....	\$20,801.92		
Per diem, members of the board.....	130.00		
Office supplies.....	372.06		
Water for sale.....	498.07		
Water for service.....	78.58		
Laborer wages, 9 watchmen and 1 chauffeur included..	11,110.65		
Truck expenses.....	222.96		
Fire insurance premium.....	600.05		
Hurricane insurance premium.....	2,387.95		
State Fund Insurance Premium.....	581.75		
Fire equipment service.....	2,465.88		
Unexpendable property.....	204.14		
General expenses (In this item are included the telephone, lighting and other bills).....	2,862.35		
Maintenance and Repairs:			
General repairs.....	1,644.23		
Street repairs.....	73.78		
Other Disbursements:			
Private piers insular police salaries.....	2,005.08		
Amount drawback to Texas Company.....	412.32	46,451.77	
Balances:			
Unexpended balance by the Special Disbursing Officer.....			670.11
Unexpended balance by the Special Disbursing Officer (Petty Cash).....			250.00
Total.....			83,502.54
BALANCE ON HAND JUNE 30, 1943.....			\$222,060.84

SAN JUAN HARBOR FUND, TRUST FUND

BALANCE OF JUNE 30, 1942.....		\$187,443.15
Harbor dues collected by the Captain of the Port.....		58,999.45
		\$246,442.60
Amount returned to Porto Rico Coal Company.....		10.00
BALANCE ON HAND JUNE 30, 1943.....		\$246,432.60
CONSTRUCTION OF HARBOR IMPROVEMENTS AT SAN JUAN		
BALANCE OF JUNE 30, 1942.....	\$37.20	
BALANCE OF JUNE 30, 1943.....		\$37.20
CONSTRUCTION OF HARBOR IMPROVEMENTS BONDS OF 1929		
BALANCE OF JUNE 30, 1942.....	\$88.58	
BALANCE OF JUNE 30, 1943.....		\$88.58
CONNECTION TRACT FUND		
BALANCE OF JUNE 30, 1942.....	\$19.99	
BALANCE OF JUNE 30, 1943.....		\$19.99

EXHIBIT No. 1

COMPARATIVE STATEMENT SHOWING AMOUNTS COLLECTED DURING
THE FOLLOWING FISCAL YEARS

Charges	1936-1937	1937-1938	1938-1939	1939-1940	1940-1941	1941-1942	1942-1943
Wharfage.....	\$44,565.81	\$41,494.72	\$53,293.31	\$60,620.29	\$92,883.59	\$110,605.73	\$81,713.26
Storage.....	3,022.03	1,863.28	2,158.27	5,151.62	5,297.57	1,847.48	12,897.12
Demurrage.....						3.48	1,373.54
Mooring.....	10,170.16	11,152.97	12,886.00	11,495.25	14,525.23	15,058.55	15,291.52
Water.....	4,917.09	5,060.19	3,679.73	2,759.70	3,838.70	4,877.20	4,181.30
Lease.....	2,566.21	5,066.20	5,066.21	5,066.22	5,066.20	5,066.21	4,507.87
Other.....						.30	4,317.18
Totals.....	\$65,241.30	\$64,637.36	\$77,083.52	\$85,093.08	\$121,611.29	\$137,458.95	\$124,281.79

EXHIBIT No. 2

COMPARATIVE STATEMENT SHOWING COLLECTIONS OF CHARGES DURING THE FISCAL YEARS 1941-1942 1942-1943

Months	Wharfage		Demurrage & Storage		Mooring		Water		Other & Lease		Totals	
	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43
1942												
July.....	\$8,451.73	\$7,262.01	\$159.94	\$365.15	\$1,216.72	\$909.33	\$467.70	\$589.90	\$983.11	\$983.10	\$11,279.20	\$10,109.49
August.....	8,472.00	6,900.09	126.08	1,889.78	1,158.58	1,497.87	410.10	460.20	314.00	314.00	10,476.76	11,611.04
September.....	12,016.22	8,024.06	289.06	716.89	2,119.20	1,848.82	687.90	663.70	314.00	314.00	15,422.38	11,567.47
October.....	11,044.20	4,625.49	51.53	3,170.37	1,486.71	1,654.15	319.80	346.40	310.00	419.46	13,212.24	10,215.87
November.....	8,531.01	7,450.52	26.68	832.20	1,998.36	1,283.74	282.70	143.90	310.00	310.00	10,148.76	10,052.36
December.....	10,197.91	8,624.98	71.91	1,034.07	1,209.10	1,900.16	373.50	315.20	310.00	538.29	12,162.42	12,412.70
1943												
January.....	10,935.20	7,494.05	104.09	618.95	1,261.23	1,176.77	605.20	157.30	983.10	1,039.10	13,891.82	10,486.17
February.....	10,843.83	5,555.36	117.57	1,296.64	1,328.34	802.27	452.00	231.50	310.00	496.13	13,051.74	8,321.90
March.....	9,200.99	5,582.12	29.46	368.78	1,203.37	1,164.43	370.00	302.20	310.00	3,266.84	11,118.82	10,684.37
April.....	7,487.33	3,386.35	609.15	1,318.06	1,215.62	552.51	302.90	296.40	310.00	457.13	9,925.00	6,010.45
May.....	7,159.94	5,893.80	219.92	1,125.41	1,159.73	994.12	376.50	351.30	310.00	376.62	9,226.09	8,741.25
June.....	6,265.37	10,914.43	45.57	1,594.36	1,696.59	1,507.35	225.90	323.30	310.30	278.38	7,543.73	14,617.82
	\$110,605.73	\$81,713.26	\$1,850.96	\$14,270.66	\$15,068.55	\$15,291.52	\$4,877.20	\$4,181.30	\$5,065.51	\$8,825.05	\$137,458.95	\$124,281.79

(*) In March are included \$142.70 for Wharfage charges and \$10.50 for storage charges paid directly to the Treasurer of Puerto Rico, as per Auditor's Receipt No. 4712.

EXHIBIT No. 3
STATEMENT SHOWING COLLECTION OF CHARGES DURING FISCAL YEAR 1942-1943

Date	Wharfage	Storage	Demurrage	Mooring	Water	Lease	Other	Total
1942								
July	\$7,262.01	319.91	45.24	909.33	589.90	983.10	.....	\$10,109.49
August	6,900.09	1,811.86	77.92	1,497.87	460.20	310.00	4.00	11,061.94
September	8,024.06	692.28	24.61	1,848.82	663.70	310.00	4.00	11,567.47
October	4,625.49	2,767.88	412.49	1,654.15	346.40	310.00	109.46	10,215.87
November	7,450.52	592.83	239.37	1,283.74	143.90	310.00	32.00	10,052.36
December	8,624.98	888.35	144.72	1,900.16	315.20	310.00	228.29	12,412.70
1943								
January	7,494.05	534.90	84.05	1,176.77	157.30	983.10	56.00	10,486.17
February	5,555.36	1,175.50	61.14	802.27	231.50	310.00	186.13	8,321.90
March	5,582.12	351.02	17.76	1,164.43	302.20	126.67	3,140.17	10,684.37
April	3,386.35	1,063.64	264.42	552.51	296.40	225.00	232.13	6,010.45
May	5,893.80	1,124.91	.50	994.12	351.30	115.00	281.62	8,741.25
June	10,914.43	1,593.04	1.32	1,507.35	323.30	215.00	63.38	14,617.82
	\$81,713.26	12,897.12	1,373.54	15,291.52	4,181.30	4,507.87	4,317.18	\$124,281.79

(*) In March are included \$142.70 for Wharfage charges and \$10.50 for Storage charges paid directly to the Treasurer of Puerto Rico, as per Auditors' Receipt No. 4712.

TABLE No. 1 (From Exhibit No. 3)

STATEMENT SHOWING THE CARGO SHIPPED AND DISCHARGED THROUGH THE BULKHEADS AND SHEDS AND AMOUNT COLLECTED ON WHARFAGE

Month	Packages	General Cargo		Collected Gen. Cargo	Lumber Superficial Feet	Collected Lumber	Fuel Oil		Total Collected 1942-1943
		Weight in pounds	Meas. in Cubic Ft.				Gasoline & Diesel Oil Tons	Collected	
1942									
	July.....	33, 244, 409	329, 608	\$3, 503. 51 2, 860. 01	2, 567, 118	\$898. 49			\$7, 262. 01
	August.....	24, 731, 333	367, 781	2, 972. 39 2, 772. 05	3, 301, 889	1, 155. 65			6, 900. 09
	September.....	31, 562, 845	453, 221	3, 980. 21 3, 332. 73	934, 407	327. 04	10, 993. 15	\$384. 08	8, 024. 06
	October.....	21, 506, 578	258, 495	2, 010. 65 2, 216. 51	119, 750	41. 91	7, 278. 00	356. 42	4, 625. 49
1943									
	November.....	39, 802, 597	374, 613	3, 752. 87 3, 416. 21	792, 649	277. 45	66. 50	3. 99	7, 450. 52
	December.....	32, 035, 114	609, 483	3, 044. 70 3, 422. 50	258, 407	157. 72			8, 624. 98
	January.....	42, 962, 688	424, 400	4, 087. 14 3, 351. 41	88, 987	55. 50			7, 494. 05
	February.....	24, 989, 767	343, 633	2, 603. 87 2, 939. 54	19, 114	6. 69	150. 25	5. 26	5, 555. 36
	March.....	24, 597, 263	357, 409	2, 387. 96 3, 183. 75	22, 731	10. 41			5, 582. 12
	April.....	24, 657, 338	108, 829	2, 441. 17 856. 09	49, 909	17. 47	593. 73	71. 62	3, 386. 35
	May.....	28, 868, 334	346, 771	2, 587. 90 2, 874. 22	1, 231, 693	431. 10	9. 64	. 58	5, 893. 80
	June.....	10, 007, 196	1, 132, 538	986. 32 9, 783. 39	413, 403	144. 72			10, 914. 43
		338, 965, 552	5, 106, 781	\$34, 358. 69 43, 008. 47	9, 800, 057	\$3, 524. 15	19, 091. 27	\$821. 95	\$81, 713. 26

TABLE No. 2 (From Exhibit No. 3)
STATEMENT SHOWING MERCHANDISE STORED AT THE BULKHEADS AND SHEDS AND AMOUNT
COLLECTED FOR STORAGE CHARGES FISCAL YEAR 1942-1943
FISCAL YEAR 1942-1943

Merchandise	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Totals
Alumina.....	\$28.34	59.34				325.62	107.40					373.74	787.04
Asphalt.....							107.40						107.88
Canned Goods.....		195.76	6.39			108.28							310.43
Ceol.....					48.9	.72	3.38						52.89
Cement.....				14.25	43.32	167.90	18.						57.75
Empty Bags.....	2.16										19.51	65.35	254.92
Empty Bottles.....								326.99	61.11	73.70	985.28	8.27	1,455.35
Fish.....							107.47			.74		2.21	186.55
Flour.....	1.50	262.67		5.75	71.12			3.75					715.00
Furniture.....		4.05		307.51				.12				1.56	56.24
Lard.....				50.51	6.04								193.38
Lumber.....	4.09	8.10	9.41	177.93		25.13	31.35	4.05	1.70	.99	57.18	48.12	1,410.99
Oil and Grease.....			73.20	1,192.48					23.40	634.65	9.65	7,031.0	9,632.12
Paper.....		40.80							15.67	13	5.18	14.40	241.05
Pipes and Figs.....				205.67						53.78			175.01
Poles.....					121.23							3.35	569.11
Pork.....		5.94		446.42									1,092.48
Rice.....	2.22	771.93	318.33			48.57		149.00	17.52	2.09	.09		281.74
Rope.....			64.47									39.34	594.99
Rum and Wine.....	200.29	228.05	39.63		17.68		37.88			4.29		1.99	45.77
Sausages.....						1.61		33.18			21.30	55.26	109.74
Shoes.....										10.65			73.52
Tobacco.....				62.87									423.90
Tallow.....			296.23	41.17		27.45	94.05					351.69	2,404.38
Various.....	81.31	235.22	18.72	149.22	145.82	183.59	39.79	658.41	231.62	272.62	36.37	601.79	601.79
W. Bran.....													
	\$319.91	1,811.86	692.28	2,757.88	592.83	889.35	534.90	1,175.50	351.02	1,053.64	1,124.91	1,593.04	12,897.12

TABLE No. 3 (From Exhibit No. 3)
STATEMENT SHOWING THE KIND OF VESSEL THAT MOORED AT THE BULKHEADS AND SHEDS AND AMOUNT
COLLECTED FOR MOORING CHARGES
FISCAL YEAR 1942-1943

Merchandise	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Totals
Steam vessels.....	\$855.11	1,409.83	1,790.56	1,441.75	1,176.54	1,583.78	954.81	623.96	1,104.29	509.79	943.19	1,431.40	13,825.01
Sail vessels.....	52.13	76.40	58.26	210.29	101.24	157.18	216.04	147.06	45.81	42.72	38.13	75.95	1,221.21
Harbor Crafts.....	2.09	11.64		2.11	5.96	159.20	5.92	31.25	14.33		12.80		235.30
	\$809.33	1,497.87	1,848.82	1,654.15	1,283.74	1,900.16	1,176.77	802.27	1,164.43	552.51	994.12	1,507.35	15,291.52

7. Estimates and preparation of reports to the Puerto Rico Planning Urbanizing and Zoning Board for their approval of projects with insular emergency funds.

8. Design of 150 meters of marginal bulkhead wharf to be built west of Pier No. 12 at Puerta de Tierra.

9. Revision of a project prepared by the engineering firm "Dávila & Llenza", of Río Piedras, for the construction of a marginal wharf at Aguadilla Harbor.

10. Fire prevention project for the building of the Department of the Interior.

11. Preparation and revision of Rules and Regulations Applying at Public Wharves and of tariffs applicable thereof.

12. Project for repairing the roofs of Piers 6 and 13 with application to the Insular Emergency Board and the Puerto Rico Planning, Urbanizing and Zoning Board.

13. Project for repairs and improvement of streets leading to Piers 12 and 13 of the San Juan Harbor Board, in Puerta de Tierra.

14. Construction and erection of gates at the entrances of Piers 12, 13 and 14, in compliance with request of the U. S. Coast Guard for the identification of persons entering the premises.

15. Repairs to general equipment owned and operated by the San Juan Harbor Board.

16. Submittal to the War Production Board for priority assistance for critical materials to be used by the division during the fiscal year 1943-44.

17. General repairs undertaken to Piers 6, 12 and 13, owned and operated by the San Juan Harbor Board.

18. Reports on studies made by the Engineering Division for Piers and Harbors and the U. S. Experiment Station at Vicksburg, Mississippi, in relation to the construction of a new project for Ponce Bulkhead Wharf.

19. Revision of project for the construction of a small landing pier at "Punta Pozuelo" by the "Cooperative Pozuelo".

20. Preparation of a bill creating the "Insular Ports Authority for Puerto Rico", to be studied by a committee appointed by the Governor of Puerto Rico.

21. Public hearings attended at the Public Service Commission, in regard to tariffs, etc.

22. Estimates prepared for the repair and painting of the roofs of Piers 6 and 13.

23. Valuation of Piers 6, 12 and 13 property of the San Juan Harbor Board.

The activities of the division during the year 1942-43 were curtailed by restrictions of the Federal Government in regard to construction projects, so that critical war materials might be saved. Due to these restrictions it has been impossible to start the construction of Pier No. 4 in San Juan and of 150 meters of marginal wharf west of Pier No. 12 at Puerta de Tierra; and the Ponce Bulkhead Wharf, although all these projects have been authorized by the Legislature of Puerto Rico.

The project for the construction of the bulkhead wharf at Arecibo Harbor was approved by the U. S. Engineer Office and the Secretary of War, but on account of the considerable amount of critical war material involved and upon recommendation of the U. S. Engineer Office at San Juan, a new project was prepared by this division using native timber instead. The lumber is to be supplied by the U. S. Engineer Office from their sawmill at the forest reservation at Luquillo. This project will be constructed as soon as the Federal Government undertakes the dredging of the harbor.

During most of the year this division rendered valuable services to the Office of Civilian Defense in the preparation of technical reports and projects.

The Chief of the Engineering Division for Piers and Harbors has acted as Treasurer of the San Juan Harbor Board since May 1st, 1942 and during the end of the fiscal year 1942-43 also acted as Engineer Director of the Bureau of Automobiles and Traffic.

MUÑOZ RIVERA PARK
COMMISSION AND SERVICE OF PARKS AND RECREATION
ANNUAL REPORT 1942 1943

In the history of civilization, it is easily observed that a vast development of art and play has always provided the best means for the expression of human emotion through constructive channels; and it always resulted in the amelioration of the social environment.

Art and Recreation have long been recognized as the Royal road to ethics because it is the natural means to the realization of the physical as well as the moral welfare of human society.

The justification for any public service is its social contribution, and this contribution can be effective only as its benefits are widespread and reach all the elements of our population.

The Park movement will fall short of its opportunity as well as its function if it does not make its fullest contribution to the cultural development of the Island.

This movement started in 1919 but for the benefit of the City of San Juan only, through what is known as the Parks Commission.

In April 24, 1942 an Insular Park Service was created by Act No. 46 of our Legislature which makes these facilities extensive to the rest of the Island as well.

Although our goal includes the planning, construction and care of places for public recreation, such as athletic fields, bathing beaches, swimming pools, community centers, community libraries, buildings for moving pictures, museums, open air theaters; and lecturer parks and any other work or establishment to be devoted to all these cultural and recreational activities in which the public may participate directly, will also be sponsored.

PARK COMMISSION

The gardens of the Muñoz Rivera Park were improved by renovating some of the structures, adding fertile soil and manure, planting ornamental plants, thinning of crowded trees and shrubs, maintaining the lawns, and controlling parasites and diseases.

The grounds of the Department of the Interior, the Department of Agriculture and Commerce and at Recinto Sur were graded and landscaped.

Construction:

New buildings and recreation places were either constructed or considerably improved. The most important among these were a public lavatory, a concrete basket ball court in accordance with the latest regulations, the Barrio Obrero Basket Ball Court; repairs to the Sixto Escobar Park, and the construction of restaurant huts and gardens for the Armed Forces at Recinto Sur.

Recreation:

Due to the improvements carried out by the Parks Commission the recreational facilities for the public were considerably increased. As an example it may be mentioned that the total attendance to the Sixto Escobar Base Park during the year was 143,272 which is the largest annual attendance ever attained. Olympic games and boxing bouts also took place in the park. The public enjoyed freely throughout the year the facilities offered for the playing of baseball, soft-ball, tennis, volley-ball, basket-ball, table tennis and other sports.

Public Relations:

The Commission furnished plants and flowers to the Insular and Municipal Governments and to the Tenth Naval District and the Puerto Rico Military Department.

The pergolas and other sites of the Muñoz Rivera Park were used by charity institutions for money raising activities.

Concessions:

The funds collected from the leasing of facilities amounted to \$5,185.71 during this fiscal year as compared to \$3,807.46 during the previous year.

Police Service:

The Park Police force was able to maintain order notwithstanding the increased attendance to the Park this year.

SERVICE OF PARKS

At the end of this fiscal year the Service of Parks had been in operation only nine months and in spite of the war restrictions on critical material, it accomplished considerable work.

Base-Ball fields and courts for other games were either completed or under construction in many places throughout the Island. Work of this sort is being developed in the following municipalities:

Guayanilla, Tallaboa, Ponce Playa, Patillas, Florida, Río Piedras, Cayey, Aibonito, Toa Baja, Trujillo Alto, and Río Grande.

All the above projects are being constructed with Park Service Funds exclusively.

The Guánica Athletic Field is being constructed as part of a \$250,000 W.P.A. Island wide project of which 25 per cent is contributed by the Insular Park Service.

It is hoped that the National Park Service will grant to Puerto Rico the same benefits and facilities that have been extended to Hawaii and Alaska.

MUÑOZ RIVERA PARK

95

SIXTO ESCOBAR PARK

BASE-BALL PROFESSIONAL SEASON 1942-43

Date	Games	Gate Returns Professional League	Park Commission Participation
1942			
October 11.....	2	\$4,061.60	\$81.22
October 18.....	2	3,304.90	66.10
October 25.....	2	2,535.95	50.72
	6	\$9,902.45	\$198.04
Average Return per Game.....		\$1,650.41	
November 1.....	2	\$3,102.50	\$62.05
November 8.....	2	2,387.30	47.75
November 15.....	2	3,309.95	66.20
November 22.....	2	2,647.85	52.95
November 29.....	1	1,689.95	33.80
	9	\$13,137.55	\$262.75
Average Return per Game.....		\$1,459.72	
December 6.....	2	\$2,250.10	\$45.00
December 13.....	2	4,002.10	80.04
December 20.....	2	2,673.80	53.48
December 27.....	2	2,488.80	49.77
	8	\$11,414.80	\$228.29
Average Return per Game.....		\$1,426.85	
1943			
January 3.....	2	\$3,171.05	\$53.42
January 6.....	2	1,385.20	27.70
January 10.....	2	2,599.15	51.98
January 17.....	2	2,559.80	51.19
January 24.....	2	3,609.10	72.18
January 31.....	2	3,378.95	67.58
	12	\$16,703.25	\$334.05
Average Return per Game.....		\$1,391.94	
February 7.....	2	\$1,756.05	\$35.13
February 14.....	2	3,578.45	71.57
February 27.....	1	1,509.55	30.19
	5	\$6,844.05	\$136.89
Average Return per Game.....		\$1,368.81	
March 13.....	1	\$1,077.70	\$21.55
March 14.....	2	1,049.35	20.98
March 20.....	1	384.85	7.70
March 21.....	2	353.00	7.06
	6	\$2,864.90	\$57.29
Average Return per Game.....		\$477.48	
Total Park Commission Participation 2% of Returns.....			1,217.31
Total Gross Gate Returns.....			60,867.00
Number of Games.....			46

Out of the total of \$1,217.31, \$13.25 were collected for the American Red Cross.

REPORT OF THE COMMISSIONER OF THE INTERIOR

SIXTO ESCOBAR PARK

BOXING AMATEUR SEASON NO CHARGE 1942-43

Date	Gross Income	
January 8.....	\$142.75	
January 15.....	294.60	
January 22.....	279.5	
January 29.....	301.05	
	\$1,017.95	
Average Gross Income per Bout.....		\$254.49
February 1.....	\$148.75	
February 3.....	183.05	
February 5.....	285.35	
February 8.....	154.00	
February 10.....	509.80	
February 12.....	210.05	
February 15.....	532.70	
February 19.....	449.15	
February 22.....	578.80	
	\$3,051.65	
Average Gross Income per Bout.....		\$339.07
Total Gross Income.....		\$4,069.60

PROFESSIONAL SEASON

Date	Gross Income	Park Rent (5%)
May 4.....	\$510.40	\$25.52
May 19.....	277.50	13.88
May 26.....	510.00	25.50
	\$1,297.90	\$64.90
Average Gross Income per Bout.....		\$432.61
June 2.....	\$460.00	\$23.00
June 18.....	547.70	27.39
June 25.....	865.70	43.29
	\$1,873.40	\$93.68
Average Gross Income per Bout.....		\$612.23
Total Gross Income.....		\$3,171.30
Total Park Rent (5%).....		\$158.58

SPORTS STATISTICS PROFESSIONAL BASE-BALL 1942-43

	October	November	December	January	February	March	Total
	3 24,189 4,031 8,063	5 30,639 3,404 6,128	4 26,834 3,917 6,834	6 39,640 3,303 6,606	3 15,181 3,036 5,060	4 6,789 1,131 1,697	25 46 143,272 5,510 3,114
No. of Days in which Games were held.....							
Number of Games.....	6	9	8	12	5	6	46
Attendance.....	24,189	30,639	26,834	39,640	15,181	6,789	143,272
Average Attendance per Game.....	4,031	3,404	3,917	3,303	3,036	1,131	5,510
Average Attendance per Day.....	8,063	6,128	6,834	6,606	5,060	1,697	3,114

SPORTS STATISTICS PROFESSIONAL BOXING

	May	June	Total
	3 1,655 551	3 2,726 908	6 4,381 750
Days of Fight.....	3	3	6
Attendance.....	1,655	2,726	4,381
Average Attendance.....	551	908	750

AMATEUR BASE BALL 1942-43

Month	Days of Games	No. of Games	Total Attendance	Attendance per Game
July.....	27	38	4,340	161
August.....	10	23	3,782	378
September.....	9	22	725	805
October.....	19	34	1,125	592
November.....	20	38	1,500	750
December.....	19	38	1,375	724
January.....	20	36	2,225	111
February.....	22	35	1,950	886
March.....	30	61	5,300	176
April.....	15	29	3,900	260
May.....	12	21	2,100	175
June.....	14	28	2,650	189
TOTAL.....	217	403	30,972	
No. of Participant Players.....			8,866	

AMATEUR SOFT-BALL 1942-43

Month	Days of Games	No. of Games	Total Attendance	Attendance per Game
July.....	27	42	4,285	102
August.....	26	52	7,800	150
September.....	11	40	4,950	124
October.....	20	32	1,400	44
November.....	19	42	2,275	54
December.....	18	28	1,750	63
January.....	14	31	2,250	73
February.....	20	0	4,525	91
March.....	30	72	6,700	93
April.....	29	63	6,100	97
May.....	14	33	3,325	101
June.....	24	41	4,425	108
TOTAL.....	259	526	49,785	
No. of Participant Players.....			12,624	

AMATEUR BASKET-BALL 1942-43

Month	Days of Games	No. of Games	Total Attendance	Attendance per Game
July				
August				
September				
October				
November				
December				
January	8	11	1,750	159
February	11	12	650	54
March	13	24	1,750	73
April	11	22	1,650	75
May	10	10	525	53
June	12	14	675	48
TOTAL	65	93	7,000	
No. of Participant Players			1,860	

AMATEUR VOLLY-BALL 1 42-43

Month	Days of Games	No. of Games	Total Attendance	Attendance per Game
July	16	57	1,550	27
August	6	63	275	4
September				
October	11	47	775	17
November	19	76	1,275	17
December	6	20	150	8
January	5	12	225	19
February	8	8	325	41
March	7	7	325	47
April	14	19	875	46
May	12	12	550	46
June	8	8	275	34
TOTAL	112	329	6,600	
No. of Participant Players			4,603	

PERMITS FOR RECREATION AND OTHERS 1942-43

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June
Parties.....	1	2	2	1	1	5	2	3	4	1	6	2
Kermesses.....							1		1		1	1
Athletics.....	10	27	32	36	49	34	37	43	41	49	23	16
Others.....												
Total Attendance to Parties.....	23	65	76	80	70	205	40	210	250	40	218	94
Total Attendance to Kermesses.....							4,080	20,602	6,000	25,925	11,315	9,000
Total Attendance to Athletics.....	13,465	11,857	6,925	3,600	5,671	6,175	11,550	20,602	17,930	25,925	11,315	11,673

Totals

Parties.....	30
Total Attendance to Parties.....	1,371
Kermesses.....	4
Total Attendance to Kermesses.....	19,080
Athletics.....	397
Total Attendance to Athletics.....	146,688

DIVISION OF ACCOUNTS AND DISBURSEMENTS

This Division prepared and passed for payment during the fiscal year 1942-1943, 11,893 vouchers, which represented 545 main accounts, as follows:

Class	Vouchers	Amount
On account of Contracts.....	325	\$1, 106, 550.00
Office salaries and expenses for materials, supplies and services pertaining to work executed by Administration.....	11, 568	3, 445, 054.19
Cash payments on 12, 053 laborers' pay rolls.....		2, 328, 758.91
TOTAL.....	11, 893	\$6, 880, 363.10

Furthermore, vouchers from the Isabela Irrigation System in the amount of 454, aggregating the sum of \$645,548.28 were sent to the Auditor's office through this Division, for payment.

The Special Disbursing Officer of this Department made during this fiscal year 1942-1943, 137,943 cash payments on 12,053 pay rolls, amounting to \$2,328,758.91 on the accounts indicated below:

Maintenance and repair of public roads and bridges.....	\$883, 048. 65
Road Survey and construction.....	138, 358. 16
Construction and repair of public buildings.....	116, 132. 43
Reconstruction and repair of Insular Telegraph lines.....	9, 197. 51
Fund for the general plan of Municipal roads.....	480, 337. 44
Muñoz Rivera Park.....	82, 242. 40
Municipal projects and miscellaneous.....	573, 533. 72
Construction of Capitol Building.....	45, 908. 60
Total.....	\$2, 328, 758. 91

RESUMÉ

Disbursed by vouchers.....	\$4, 551, 604. 19
Disbursed by pay rolls (Labor).....	2, 328, 758. 91
Total.....	\$6, 880, 363. 10

The requisitions for material, machinery, office supplies and transportation issued on the Bureau of Supplies, Printing and Transportation numbered 4,362 and the cost of articles paid to the Bureau amounted to \$626,427.34. Direct orders issued to individuals and private concerns numbered 138, and their cost amounted to \$23,391.29.

STATEMENT OF UNEXPENDABLE PROPERTY

Value of Government property under the jurisdiction of the Department at the close of business on June 30th, 1942, amounted to---	\$619,780.34
Property acquired during fiscal year 1942-1943-----	121,304.78
Total-----	\$741,085.12
Deduction corresponding to worn out articles-----	19,025.66
Present value of property under this Department on June 30th, 1943-----	\$722,059.46

The following table shows a comparison of the expenditures of this fiscal year, with those of the previous year:

Fiscal Year	Vouchers	Amount	Laborer's pay rolls	Amount	Total
1941-1942.....	12,270	\$5,367,526.36	9,906	\$1,230,044.75	\$6,597,571.11
1942-1943.....	11,893	4,551,604.19	12,053	2,328,758.91	6,880,363.10
DIFFERENCE.....	377	\$815,922.17	2,147	\$1,098,714.16	\$282,791.99

CHANGES IN PERSONNEL

During this fiscal year 1942-1943, the following changes were made in the personnel of this Department:

Permanent appointments, 85; temporary appointments, 261; reinstatements, 65; transfers from this Department, 3; Military Service, 11; retirements, 3; salaries increased and decreased, 308; ceased, 529; promotions, 26; deceased, 2.

ISABELA IRRIGATION SERVICE

Quebradillas, P. R.

ANNUAL REPORT

General Summary.—Operating results of this Organization for the fiscal year ending June 30, 1943 were satisfactory and the prospective view for the coming year is very promising.

Under Law No. 200 of May 11, 1942, an appropriation of \$175,000 was made by the Legislature of Puerto Rico for the construction of Hydroelectric Plant No. 3. Of this appropriation, \$75,000 was made available during the year and with this amount considerable progress has been made.

On May 10, 1943, another Act was approved, No. 58, appropriating the sum of \$20,000 from the funds of the Treasury of Puerto Rico to continue irrigation and hydroelectric investigations in that part of the Island extending eastward from the Guajataca River to the municipal boundary between the towns of Hatillo and Arecibo. The purpose of these investigations is to extend the benefits of irrigation to those lands, and at the same time to improve the financial condition of this Service.

Production of electric energy in the district amounts to 9,692,720 kw. hrs., showing an increase of 1,942,800 kw. hrs. over the previous year. Only 200,474 kw. hrs. were purchased at the interconnection.

Total power generated and purchased amounted to 9,893,194 kw. hrs., or 315,521 kw. hrs. over last year.

Energy delivered to consumers in the district amounted to 5,307,252 kw. hrs. and energy sold at the interconnection was 2,903,034 kw. hrs. Total gross sale amounted to \$259,324.56.

New extensions and constructions were limited by war production regulation.

Work on the construction of Power Plant No. 3 was initiated during the past fiscal year. All excavations on the access road to plant site have been completed, including the grading of the site. Bench excavations for the four-foot diameter reinforced concrete penstock were also completed. Up to June 30, 1943 there were driven 1,225 lineal feet of the six-foot diameter power tunnel at a rate

of \$4.00 per cubic yard. The erection of a concrete mixing plant was begun during the end of June.

To date a total amount of \$25,358.12 has been spent on this project, including the amount spent on surveys and transportation. The estimated cost of the project is \$210,122.69, and the estimated energy to be generated will amount to 7,000,000 kw. hrs.

The hydroelectric equipment consisting of a 1,400 H. P. turbine, 1250 KVA generator, switch gear, substation, etc. was ordered to the James Leffel & Co. and the General Electric Co. at a total cost of \$53,000.

A total of 83,653 acre-feet of water were drawn from the Guajataca Reservoir in order to meet the requirement for the production of electric energy. The run-off into the reservoir was 84,995 acre-feet, exceeding the draft by 1,342 acre-feet; but about 7,000 acre-feet had to be wasted during the floods of October and November, 1942, and it was necessary, therefore, to draw about 5,160 acre-feet from the storage available in the Reservoir at the beginning of the fiscal year under review to meet the generating demand.

Out of the total volume of water drawn from the reservoir only 2,456 acre-feet were delivered for irrigation purposes, under provisions of Law No. 178 of May 14, 1941, and 184.2 acre-feet were sold under direct orders with a cash value of \$426.05. Water delivered for municipal waterworks and for domestic and industrial purposes amounted to 3,180 acre-feet with a cash value of \$13,875.37.

In accordance with provisions made in Act No. 201 of May 11, 1942, the Irrigation Commission created by said Law ordered the exclusion of 1,183.2 acres of land expropriated by the Federal Authorities for the establishment of the Air Base No. 1 at Punta Borinquen, and 92 acres used by the Puerto Rico Housing Authority for the settlement known as "José de Jesús Esteves" from the total acreage included at the formation of the Permanent Irrigation District.

Work is in progress under project No. 32-35-1-260 of the War Emergency Program, at the Spillway Channel of the Guajataca Reservoir, and preparatory work is under way for lining with concrete the Main Canal of the Irrigation System, in a length of six kilometers, to prevent excessive seepage losses, with funds obtained from the War Emergency Council, under project No. 32-78-1-259 approved by said Council.

The fiscal year has been successful as to financial results as will be determined from the following data:

The cash collections from operation only amounted to \$324,576.17, distributed as follows:

Sale of electric energy-----	\$270,342.39
Irrigation taxes and sale of water for irrigation and water- works, etc.-----	37,575.28
Miscellaneous revenues from contributions, rents, etc.-----	16,658.50
Total -----	<u>\$324,576.17</u>

The sum of \$156,661.76 was disbursed to meet payment of current operation and maintenance expenses as well as necessary improvements and extensions to the irrigation and hydroelectric systems.

Payments were also made as follows:

1. For purchases of equipment, materials, and supplies made thru Bureau of Supplies, Printing, and Transportation	\$61,328.99
2. Previous years' accounts -----	6,379.58
3. Reimbursements made to Insular Treasury in partial pay- ment of advances made to this Service during previous years -----	40,000.00
4. Partial contribution by this Service for the payment of interest on bonded debt.-----	16,812.50
Total -----	<u>\$124,521.07</u>

This has been the first year in which it has not been necessary for the Insular Treasury to advance funds to complete payment of the annual amortization of bonds and interest due, as these were defrayed with the income derived from the Special Tax of one-tenth of one per cent authorized by Act 120, approved May 5, 1939, as explained below:

Payment on principal-----	\$300,000.00
Payment of interest accrued-----	114,812.50
	<u>\$414,812.50</u>
Income obtained from Special Tax-----	398,000.00
Difference -----	<u>\$16,812.50</u>

This difference was defrayed out of the general funds of the Organization.

The result obtained during the year under report confirm our assertion of last year that the ever increasing income of the Service will permit within a few years to meet payment of the fixed debt and interest accrued thereon besides the normal cost of operation.

IRRIGATION SYSTEM

Direction and Supervision:

MR. DOMINGO PANAFNI-----Chief, Irrigation Division, and Assistant Chief Engineer.
MR. SAÚL RODRÍGUEZ ESTRONZA-----Assistant Engineer.
MR. PEDRO GARCÍA BADILLO-----Clerk.
MISS PAULA LÓPEZ NÚÑEZ-----Clerk.

Operation:

MR. JUAN GARCÍA ROCA-----Overseer for the Operation and Construction of Irrigation System.
MR. JUAN ADAMES-----Ditchrider.
MR. QUINTÍN OCASIO-----Ditchrider.
MR. JOSÉ C. VERA-----Ditchrider.
MR. SERAFÍN ALFARO-----Ditchrider.
MR. VALENTÍN JUARBE-----Ditchrider.
MR. JOSÉ DÍAZ MUÑOZ-----Ditchrider.
MR. HIGINIO ANZA ALERS-----Ditchrider.
MR. ADRIÁN FLORES-----Gate Tender.

Maintenance:

MR. JUAN MEDINA RODRÍGUEZ-----Ditchrider (at large).

General Maintenance and Construction Group:

MR. RAFAEL CANTELLOPS-----Overseer for General Construction.
MR. GREGORIO RIOLLANO-----Mechanic-Blacksmith.

IRRIGATION SYSTEM

Weather conditions, taken as a whole for the year, were favorable to the normal operation of the system. No atmospheric disturbances were observed and the rainfall on the watershed exceeded by 10.75" the average for the period of observations, yet the run-off for the months of January, February and March was only 54 per cent of the normal for that part of the year.

Temperature.—The following tabulation shows the maximum and minimum temperatures observed during the year, with the dates when they occurred, at the weather stations of Lares, Quebradillas and Isabela Experiment Station, where temperature records for the District are kept. Tabulation gives also the average of the monthly maxima and minima and the mean recorded temperature for the year at each one of these station.

	Guajataca Watershed		Irrigation District			
	Station at Lares		Station at Isabela Experiment Station		Station at I. I. S. Quebradillas	
	Tempe- rature	Date of Observation	Tempe- rature	Date of Observation	Tempe- rature	Date of Observation
Maximum.....	92°F	July 19, 1942.	91°F	Oct. 3, 1942...	96°F	Oct. 3, 1942
Minimum.....	55°F	Feb. 5, 1943...	69°F	Mar. 22, 1943.	55°F	Feb. 14, 1943
Mean Maximum.....	86°F	.....	85°F	.....	87°F	.....
Mean Minimum.....	64°F	.....	68°F	.....	66°F	.....
Yearly Average.....	75°F	.....	76°F	.....	76°F	.....

Rainfall.—The rainfall for the year amounted to: 112.62" at Lares, 111.13" at Soller and 80.74" at Guajataca Dam. The average precipitation for the watershed was 101.50" and this represents an increase of 10.75" over the normal. Rainfall observations at Lares have been recorded for the past thirty-eight years, at Soller for the past seven years and at Guajataca Dam for the last twenty-one years.

The rainfall on the watershed tributary to the Reservoir was above the normal for the period of observations, and that registered at the four stations located within the irrigable zone was also above the normal observed.

Interconnection.—During the year our system was permanently interconnected with the system of the Authority of the Water Re-

sources. Energy purchased by this district was 200,474 kw. hrs. and energy sold to the Authority was 2,903,034 kw. hrs.

No energy was purchased at the interconnection with Central Coloso.

Meter and Transformer Section.—Total number of meters installed by the end of the fiscal year was 8892 and there were 379 meters in stock. Total number of meters tested, repaired and recalibrated was 2210, of which 117 were at the request of consumers.

The following table shows classification of meters tested:

Month	Class of Test			Total
	Periodic	Complain	Laboratory	
1942				
July	245	13		258
August	332	4		336
September	511	6		517
October	311	12		323
November	100	18	8	126
December	153	3		156
1943				
January	32	12	178	217
February		16	130	146
March	41	8		49
April	3	12	7	22
May	17	4	4	25
June	25	9	1	35
TOTALS	1, 770	117	323	2, 210

The total KVA capacity of distribution transformers connected to the system was 4072½ and distributed as follows:

Urban zones in towns served	1359¾ KVA.
Branch lines (4,000-V.)	358¼ KVA.
Dependencies	170 KVA.
Main 4,000-V. line	844½ KVA.
District Hospital (Aguadilla)	300 KVA.
Housing Project (Corehado)	40 KVA.
Central Coloso	1000 KVA.
	<u>4072½ KVA.</u>

Improvements and Extensions.—Construction activities to reach new consumers were limited by regulations of the War Production Board. Only 27 new extensions were constructed. These constructions and improvement amounted to \$19,836.47.

During the year 1751 watthour meters were purchased and At Hidroelectric Plant No. I it amounted to 68.31"; at Mora Camp, to 65.46", at Isabela Experiment Station, to 76.72", and at Calero Camp,

to 76.72". The averages recorded at these stations are as follows: at Plant No. I, 63.12" for a period of seven years; at Mora, 64.35" for a period of fourteen years; at the Substation of Isabela, 70.18" for a period of fourteen years; and at Calero Camp, 61.68" for a period of fifteen years.

The records kept at the stations of Quebradillas and Coloso, located close to the limits of the Irrigation District, show a precipitation of 66.05" at the first one of the two, with an average of 57.51" for the past nineteen years, and 88.92" at the other station, with an average of 85.92" for a period of thirteen years.

The maximum precipitation for a 24-hours-period was registered at Soller, on April 27, 1943, and amounted to 5.25".

Table No. I of those of the Irrigation System, shows the monthly precipitation, in inches, recorded at each one of the stations above mentioned, compared with the monthly average observed. In this table are given also the total rainfall for the year and the yearly average for the period recorded. The heavy line in the upper part of Diagram "A" presents the percentage that the rainfall to the end of each month of the year is of the yearly rainfall on the watershed of the Reservoir. This curve is compared with similar curves for previous years.

Run-off.—The rainfall on the drainage area of the Reservoir greatly exceeded the normal during the first five months of the year and it became necessary to waste about 7,000 acre-feet of water during this period, thru the tunnel gate of the Reservoir, to prevent flooding of the Insular Road from Camuy to San Sebastián; but it was so limited during the months of December, 1942 and January, February and March, 1943, that by the 20th of May, 1943, the draft from the Reservoir had to be reduced to about 70 per cent of the daily average up to that date.

The run-off for the year amounted to 84,995 acre-feet only 7 acre-feet less than that of previous year; but, as stated above, the distribution was not as desired, and it became necessary to draw 5,160 acre-feet from the storage available at the beginning of the year, to meet the demands of the Hydroelectric System. The lowest elevation observed during the fiscal year was 187.15 meters, with an available storage of 8,625 acre-feet, on April 27, 1943, and the maximum was 197.27 meters, with 33,410 acre-feet of storage, on December 2, 1942. This storage is only 390 acre-feet below the total available storage corresponding to the new elevation of 197.40 meters to which the earth dike above the Spillway was raised.

Diagram "A", lower half, shows in heavy line, the percentage which the total run-off to the end of each month is of the normal run-off for the period observed. This curve is compared with similar ones for previous years.

Graph "B" presents the monthly run-off, in acre-feet, recorded from the year 1916-17 to date, and the mean monthly run-off for the period of observations. From August 1927 on, when impounding at the Guajataca Reservoir was commenced, observations are based on the operation of the Reservoir.

Operation of the Guajataca Reservoir.—The operation of the Guajataca Reservoir was initiated with an available storage of 18,500 acre-feet on July 1, 1942, and was completed with 13,340 acre-feet on June 30, 1943. The run-off for the year, amounting to 84,995 acre-feet, would have been more than enough to meet the demands of the System, if it had been distributed normally but, as already explained, it was excessive during the first five months of the first year, exceeding the storage capacity of the Reservoir by 7,004 acre-feet, which had to be wasted in October and November. During the months of December, January, February and March, the run-off was limited and by May 20th, the flow had to be reduced to about 70 per cent of the daily average flow up to said date. Even then the reaction was sluggish and the year was completed with a loss of 5,160 acre-feet from the initial storage.

Table II of this report shows the yearly run-off into the Guajataca Reservoir, the draft from the Reservoir, the wastage to the sea and the storage available on June 30th of each year, beginning with the fiscal year 1927-28, when operation was initiated, up to and including year 1942-43.

The heavy line of Diagram "C" represents the storage available daily in the Reservoir, compared with similar graphs for previous years.

At Diagram "D", upper part, is shown the flow diverted daily from the Reservoir, to meet the demands of the System. This flow was practically uniform up to May 20th, and at the average rate of 117.5 second-feet. From May 20th on, the flow had to be greatly reduced, averaging about 70 per cent of the flow to that date. The average daily draft for the year was 113.9 second-feet, or about half second-feet over that of previous year. The maximum flow diverted during the year was 125.58 second-feet, from January 21 to March 3 and from March 29 to April 27, 1943.

Three times during the year was the flow of the Diversion Canal interrupted for cleaning and repairing purposes: on July 26, 1942, for a period of twenty four hours, to reline with reinforced concrete a section of 85 feet of canal at the place known as "Las Palmitas", and on January 17 and March 28, 1943, for 12-hour periods each.

The lower part of Diagram "D" gives the averages of the daily losses for each month of the year and the average for the year of all the daily losses. This average amounted to 28.4 per cent of the total flow and it is 6.7 per cent below that for the year 1941-42.

Operating expenses of the Reservoir for the year, including part of the salary of the gate tender, helpers' wages and materials and supplies used amounted to \$829.25.

Operation of the Water Distribution System.—Diagram "E" illustrates how the combined flow or water drawn from the Reservoir and diverted from other sources is distributed. The total flow in the Diversion Canal during the year amounted to 83,653 acre-feet of which 6,267 were turned over to Moca Canal and the balance was passed thru Plant No. I to the Main Canal. Seepage losses on this flow amounted to 11,052 acre-feet. At least 90 per cent of this seepage will be avoided when the lining of the Main Canal be completed. Wastage at Los Cedros, for the year, amounted to 45,490 acre-feet.

Diagram "F" shows the results obtained in the operation of the Water Distribution System. Out of the total volume of 83,653 acre-feet flowing in the System, only 2,456.35 acre-feet were used for Irrigation purposes and 3,179.85 for waterworks, and domestic and industrial purposes. Dotation water in the amount of 2,249.90 acre-feet was served during the year against a total allotment of 8,145.61 acre-feet.

Information is given, in detail, at tables III, IV and IVA of this report, as to services made of sales and allotment waters, showing amounts sold or allotted monthly, deliveries made by gravity or pumps, orders issued during the year, amounts relinquished or not used, and balances carried forward.

Table V represents the operating characteristics of the South Valley Pumping Units, owned and operated by the Isabela Irrigation Service. Because of the low efficiency of these pumps it was necessary to use 68,142 KWHrs. to pump 295 acre-feet or an average of 231 KWHrs. per acre-foot pumped.

Cost of operation of the Diversion Canal and of the Distribution System were \$913.60 and \$10,768.01, respectively.

Water for Municipal, Domestic and Industrial Purposes.—Water for purposes indicated, in the amount of 3,179.85 acre-feet, were delivered during the year, under sixteen contracts. Previous year's deliveries for identical uses amounted to 2,741.00 acre-feet. The cash value of the water served under these contracts was \$13,875.36 as compared with \$8,086.73 for previous year.

The combined deliveries for purposes pointed above and for irrigation was 5,636.20 acre-feet or 6.7 per cent of the total flow in the Diversion Canal.

Maintenance.—To keep the Diversion Canal in conditions to carry at all times the high demands for water of the Hydroelectric System, it was necessary to give special attention to its maintenance. On July 26, 1942, for a period of twenty-four hours, and on January 17 and March 28, 1943, for periods of twelve hours each, services had to be interrupted to clean and repair the Canal. Maintenance expenses for the year amounted to \$2,887.64.

The distribution System received usual maintenance attention at a cost of \$8,557.26 for the year or an average of \$37.27 per kilometer of canal per year. Maintenance expenses of the Reservoir amounted to \$358.48.

PERMANENT IRRIGATION DISTRICT

At the completion of the Permanent Irrigation District, on June 30, 1938, the acreage included within its limits was fixed at 9,693.45 acres. Later on, with the establishment of the Air Base No. I at Punta Borinquen, several plots were expropriated, affecting the status of over 1,000 acres of included lands. Then, the Puerto Rico Housing Authority acquired land lot No. 10 of Corrales, Aguadilla, with 92.00 acres under irrigation, to establish the settlement known as "José de Jesús Esteves".

On May 11, 1942, the Legislature of Puerto Rico approved Act No. 201, creating an Irrigation Commission empowered to exclude those irrigable lands taken by the Federal Government and by the Puerto Rico Housing Authority, amongst others.

At the regular meeting of the Commission thus created, held on January 19, 1943, at Fortaleza, San Juan, Puerto Rico, this Organism approved, by unanimous consent of the members present, a resolution directing the Isabela Irrigation Services to exclude from the Permanent Irrigation District:

(a) The 1,183.20 acres of irrigable lands already occupied by the Air Base No. 1 of Punta Borinquen, included within limits of tracts known as Plots 1, 2, 3, 4, and 5 and,

(b) The 92.00 acres of irrigable lands taken by the Puerto Rico Housing Authority for the establishment of settlement known as "José de Jesús Esteves".

And thus the capacity of the Permanent Irrigation District was reduced by 1,275.20 acres. There are, besides, about 437 acres more which have been left without irrigation facilities. No irrigation taxes have been billed against these lands, and the probabilities are that they may have to be excluded also.

The following tabulation shows the size classification of farm units remaining in the Permanent Irrigation District at the end of fiscal year under review.

SIZE CLASSIFICATION OF FARM UNITS

Group				Number of Tracts	Area Acres
From	0.00	to	0.49	9	3.10
From	0.50	to	0.99	24	15.13
From	1.00	to	2.00	129	193.35
From	2.01	to	5.00	196	670.52
From	5.01	to	10.00	139	1,013.66
From	10.01	to	20.00	56	1,348.93
From	20.01	to	30.00	39	977.43
From	30.01	to	50.00	27	1,000.48
From	50.01	to	100.00	16	1,037.27
From	100.01	on		12	2,155.08
TOTAL				686	8,414.95

CROP CENSUS

During the month of December, 1928, a census of crops within limits of the Irrigation District was prepared by the personnel of this Service. Since then, similar work has been done yearly for statistical purposes. The following tabulation compares results of the past six years with those of the first census:

CROP CENSUS TABLE

Crops	On Dec. 31 1938 Acres	Season Ending					
		June 30, 1938 Acres	June 30, 1939 Acres	June 30, 1940 Acres	June 30, 1941 Acres	June 30, 1942 Acres	June 30, 1943 Acres
Cane.....	2,295	6,546	5,569	6,092	5,642	5,879	5,084
Corn.....	389	387	423	373	119	125	339
Tobacco.....	452	270	108	116	124	46	46
Cotton.....	.....	101	51	55	110	119	64
Plantains and Bananas.....	172	65	19	7	7	5	7
Beans.....	346	417	261	269	172	146	493
Ñames.....	72	72	62	33	33	25	25
Frijoles.....	.....	90	75	31	9	12	17
Grass.....	27	39	82	37	18	4	117
Cassava.....	37	52	25	18	14	1	5
Sweet Potatoes.....	112	116	87	44	20	16	118
Yautias.....	20	19	10	6	7	4	17
Gandules.....	6	45	45	12	.....	1	17
Grape fruit and Lemons.....	.....	46	36	36	41	37	12
Vegetables.....	.....	103	96	198	62	120	20
Miscellaneous.....	20	11	14	27	4	7	5
Totals.....	3,948	8,379	6,963	7,354	6,382	6,547	6,386
Less: One-half area planted.. in two crops.....	.....	81	109	113	51	12	286
Cross area Harvested.....	3,948	8,298	6,854	7,241	6,331	6,535	6,100
Net area Planted on date indicated.....	3,948	8,160	6,750	6,758	6,298	5,701	6,006
Plowed Area.....	724	.....	8	25	.....	.....	.....
Total Net Cultivated on Date Indicated.....	4,672	8,160	6,758	6,783	6,298	5,701	6,006
Irrigated Area.....	1,095	5,666	5,396	3,275	2,843	4,286	3,932

Certifications corresponding to	No. of Farms	Total Acres	Amount	
			Collected to June 30, 1943	Pending Collection
Farms excluded from the Irrigation District and exempted from payment of any amount whatsoever	190	489.48	.....	.....
Farms excluded from the Irrigation District, the owners of which had paid amounts equal to or greater than the resulting readjusted debt.....	24	53.87	.....	.....
Farms excluded from the Irrigation District, the owners of which have paid balances resulting from readjustment.....	17	120.75	\$1,217.71	.....
Farms excluded from the Irrigation District, the owners of which have accepted readjustment, but may as yet pay balances already determined by Insular Treasury.....	1	6.49	.....	\$53.22
Farms excluded from the Irrigation District, the owners which have not as yet accepted readjustment..	1	19.00	.....	56.24
Farms the owners of which have previously paid amounts equal to or greater than the resulting readjusted debt.....	414	4,408.11	.....	.....
Farms the owners of which have paid balances resulting from readjustment.....	415	4,623.71	41,124.05	5,775.89
Farms the owners of which have accepted readjustment, but have not as yet paid up balances already determined by Insular Treasury.....	73	530.05	.....	.....
Farms the owners of which have accepted readjustment, but balances to pay are as yet to be determined by Insular Treasury.....	.....	.....	.....	.....
Farms the owners of which have not as yet accepted readjustment.....	28	502.63	.....	10,048.01
TOTALS.....	1,163	10,754.09	\$42,341.76	\$15,333.36

* These amounts are estimated. In the case of farms included in these groups we have assumed that no water taxes have been paid since the inauguration of the service and therefore the amount to be paid in each case should be approximately equal to the total amount computed in the statement prepared by this Service.

The cane cultivated area had a drop from 5,879 acres planted previous year, to 5,084 planted this year. Only 3,712 acres of sugar cane were irrigated with 2,178 acre-feet of water, giving an average application of about 0.6 of an acre-foot per acre irrigated and 0.4 of acre-foot per acre planted to cane. There was a marked increase in the cultivation of corn, beans, grass and a few minor crops. But the cultivated area under vegetables and minor crops was greatly reduced. The area under vegetables and minor crops amounted to 220 acres and received 278 acre-feet of water, which gives an average of about 1¼ acre-foot per acre planted.

Results commented above are presented graphically in Diagram "G", and Diagram "H" shows those relative to sugar cane production.

READJUSTMENT OF FARM DEBTS

Efforts were continued during the year to collect debts accumulated on irrigable lands up to June 30, 1936, and readjusted by Act No. 143 of May 15, 1937. Results obtained up to date are shown in the tabulation that follows.

TAX LEVIES

Act No. 63, of June 19, 1919, known as the "Isabela Public Irrigation Law", provided for the imposition of taxes on all lands included in the Permanent Irrigation District, to help meet operation and maintenance expenses and to cover amortization of bonds and interest on them. This Law has been modified from time to time, by the Legislature, to relieve critical situations faced by farmers, due to adverse conditions encountered. Table VI shows, in condensed form, all modification made to date.

INCOME FROM THE IRRIGATION SYSTEM

Up to July 1, 1936, the income derived from the Irrigation System consisted mainly of irrigation taxes imposed to all included lands under the original law and those amendments noted at Table VI. A large part of these taxes were not paid and had to be readjusted, as already stated, under terms of Act No. 146 of May 15, 1937. Then, in 1936, a new plan was initiated and maintained for five years. Under this plan, known as the "Optional Plan", all included lands were assessed \$1.00 per acre per year and were given the privilege to purchase water for irrigation purposes, whenever needed.

Revenues from this source were very limited and at the end of the Optional Plan a new Act, approved on May 14, 1941, was put in force. Report of the Insular Treasurer sets at \$25,985.14 the amount taxed under this Act for this year. Due to exclusions of lands taken by Air Base at Punta Borinquen, taxes levied for the fiscal year 1943-44 amounted to only \$21,541.68 and the probabilities are that they may be reduced even further; but, at any rate, the income under this new Act greatly exceeds that under the Optional Plan.

AIR BASE NO. I AT PUNTA BORINQUEN

On or about September 5, 1939, first notice was served, thru the Press of the Island, that expropriation proceedings at Punta Borinquen, for the establishment of Air Base No. I, would be initiated soon. From that date on and up to December 31, 1942, irrigable

lands within limits of said Base to the extent of 1,183.20 acres, had been expropriated. At the regular meeting of the Irrigation Commission, on January 19, 1943, these lands were excluded from the Irrigation District together with the 92.00 acres of lot No. 10 of Corrales, Aguadilla, which had been taken by the Puerto Rico Housing Authority. There are, besides, 437 acres of irrigable lands that have been left without irrigation facilities by the establishment of said Base.

The claim presented by this Service for physical property losses and severance damages against Federal Authorities, has not been settled as yet.

HATILLO-CAMUY-QUEBRADILLAS IRRIGATION DISTRICT

On May 10, 1943, was approved irrigation Act No. 58, appropriating the sum of \$20,000 to continue irrigation and hydroelectric investigations in the lands bounded on the West by the Guajataca River and on the East by the municipal boundary line between Arecibo and Hatillo.

Preliminary investigations made under provisions of Act No. 52, of April 28, 1928, do show the possibility of placing under irrigation some 6,000 acres of land in the municipalities of Hatillo, Camuy and Quebradillas. These lands could be irrigated with the waters of the Camuy River and with probable excedents of the Isabela Irrigation District.

CONSTRUCTION ACTIVITIES

The following relation gives the works realized during the year, under the direct supervision of this Division, with their costs:

A section of the Diversion Canal, 85 feet in length, at place known as "Las Palmitas", was relined with reinforced concrete to prevent seepage and frequent breaks of the concrete lining. The cost of the work amounted to \$476.72.

Several sections of the protection bands at Guajataca Dam road, which were torn out of place by trucks, were repaired and replaced at a cost of \$40.00, paid by the owner of trucks.

A section of the Aguadilla Canal, 440 feet long, next to Borinquen Field filtration plan, was lined with plain concrete, 3" thick, at a total cost of \$775.09. Of this sum the Irrigation Service covered cost of labor, transportation and supervision, amounting to \$409.03, and the Base contributed with materials valued at \$366.06.

Laterals P4, M6.5, M6.5-7, M6.5-8, M10, M10-16, M10.5, M10.5-8, M11, M11-7, M12, M12-5, M12-Ext. and syphon under Insular Road No. 2 at kilometer 135, were removed from the right-of-way of the Insular Road No. 2, section Isabela-Aguadilla, at a cost, to June 30, 1943, of \$2,716.26, charged against F. A. P. Project No. 11 Section 2.

Earth dike, 89 meters long, was constructed across the overflow channel of the Guajataca Reservoir, to increase the impounding capacity of the lake. Dike was built to elevation 197.40 meters. The available storage at this elevation is 33,800 acre-feet. The cost of the work was \$641.77.

An 8" outlet was constructed at Station 51-43 of the Moca Canal, for Doña María E. Labadie, at a cost of \$71.64, which were paid by her.

The warehouse, at Mora Camp, was reformed and painted outside at a cost of \$530.31, to June 30, 1943. A concrete socle was constructed around the building, the worn out wooden floor was removed and replaced with a toasca floor, sidings were reinforced with iron channels taken from old iron towers, and it was totally painted outside.

Plain and reinforced, 24" in diameter, concrete pipes, were cast, in the amount of 180 lengths, for use of the Service and for sale. The total cost of the work was \$352.16.

At a cost of \$15.50, there were cast 22 reinforced concrete post, 6" \times 6" \times 6'.

A 24" gate and a 4-foot standard, cippoletti weir, were installed below the railrace of Plant No. 2, to control the waters of the Aguadilla Canal, at a cost of \$42.10.

The wooden gates at the end of the Principal Canal were reformed and a 4½-foot, standard, contracted, rectangular weir was installed, to measure the excedents of Plant No. 2. The cost of the work was \$38.76.

To control waters of the Principal Canal, a 12" gate was installed, at a cost of \$28.36, in the East Canal, below its head gate.

On June 28, 1943, work was initiated on Project No. 32-35-1-260 of the War Emergency Program, to repair the spillway channel of the Guajataca Reservoir. The cost of this work was estimated at \$7,456.40, and expenses to the end of fiscal year amounted to \$78.48.

HYDROELECTRIC SYSTEM

Direction and Supervision:

MR. HERMINIO NIGAGLIONI -----Chief, Hydroelectric Division.
MR. RAMÓN SCHAENING -----Electrical Engineer.
MR. HÉCTOR MIRANDA-----Clerk.
MRS. GUILLERMINA RODRÍGUEZ SALGADO.Clerk.

Operation:

(Distribution)

MR. RAMÓN ARCE -----Assistant Electrical Engineer.
MRS. MIRIAM GONZÁLEZ MARTÍNEZ ----Clerk.
MR. JUAN R. IBÁÑEZ -----Meter Tester.
MR. CARLOS NIEVES SANTIAGO-----Town Patrolman.
MR. ABDÓN VARELA-----Town Patrolman.

Operation:

(Production)

MR. OSCAR HAU-----Chief Plants Operator.
MR. SIMÓN ORAMAS -----Plant Operator.
MR. EUSEBIO FIGUEROA-----Plant Operator.
MR. MIGUEL MACHADO -----Plant Operator.
MR. FÉLIX ARCE ARCE-----Plant Operator (At Large).
MR. VALENTÍN RIVERA -----Plant Operator.
MR. FRANCISCO A. ALFARO CALERO----Plant Operator (At Large).
MR. MANUEL ZAMALOT-----Oiler.
MR. EUSTAQUIO RODRÍGUEZ LÓPEZ ----Oiler.

General Maintenance and Construction Group:

MR. JULIO DELGADO-----Overseer, Operation & Construction of
Electric Lines.
MR. ANGEL ROMÁN -----Asst. Line Overseer.
MR. ALBERTO GARCÍA-----Asst. Lineman.

HYDROELECTRIC SYSTEM

Production.—Power production in Power Plant No. 1 amounted to 6,002,260 kw. hrs. Production in Power Plant No. 2 amounted to 3,690,460 kw. hrs. Total production amounted to 9,692,720 kw. hrs., which represents a gain of 1,942,800 kw. hrs. over production during the previous year.

Diagram No. 1 shows power produced in the district, power imported at the interconnection, revenues obtained thru sale of that energy and the operating and maintenance expenses during each of the fifteen years the hydroelectric system has been under operation. Gross sales amounted to \$259,324.56 as compared with \$269,276.08 sold during the previous year.

Diagram No. 2 represents gross sales of energy during fifteen operating years. To the left of the curve are shown monthly sales during each year and to the right are shown amounts billed yearly. Sales for the coming year are expected not to exceed \$275,000 on account of the present war condition.

On Diagram No. 3 are included power generated at the plants in the district, power imported at the interconnection, energy delivered to consumers in the district, energy delivered to the Authority of Water Resources and energy lost during each of the months of the year.

Diagram No. 6 shows typical load curves of Plants Nos. 1 and 2. At the top is the load curve during the day of maximum production, when the output was 30,370 kw. hrs. and the peak load was 1300 KW. At the bottom is a typical daily load curve, showing an output of 29,530 kw. hrs.

Table No. 1 furnishes detailed information relative to power production in Plants Nos. 1 and 2, power purchased at the interconnection and power delivered to consumers. Outstanding figures from this table are:

Power produced	9, 692, 720 kw. hrs.
Power purchased	200, 474 kw. hrs.
Power sold to P. R. W. R. A.	2, 903, 034 kw. hrs.
Power delivered to consumers.....	5, 428, 535 kw. hrs.
Power lost.....	1, 527, 759 kw. hrs.
Per cent lost.....	15.5

Distribution.—Diagram No. 4 shows distribution of electric power among different types of consumers. The outside annulus shows kilowatt-hours distributed to each group and the inside annulus shows income obtained from each type of consumer. Total electric energy distributed was 8,331,569 kw. hrs. as compared with 8,414,129 kw. hrs. distributed the previous year.

Demand among residential rate consumers was 2,603,603 kw. hrs. or 265,458 kw. hrs. over the previous year. Commercial rate consumers demanded 1,398,949 kw. hrs. as compared with 1,513,336 kw. hrs. used during the previous year. Industrial users demanded 830,096 kilowatt-hours as compared with 1,003,693 kw. hrs. they used the previous year.

Tables Nos. 5 and 6 show energy delivered to each type of consumer and amounts billed to each type. The average price at which energy was served to consumers was \$0.0311 per kw. hr. Gross income based on energy delivered to transmission lines was \$0.2269 per kw. hr.

Tables Nos. 7 and 13 and Diagram No. 8 show statistics relative to residential rate consumers. Average consumer demanded 30.56 kw. hrs. per month for an average price of \$1.54.

Tables Nos. 8 and 14 and Diagram No. 9 contain information relative to the commercial rate consumer. This type of consumer used 94.07 kw. hrs. per month for a price of \$3.63.

On Table No. 10 are shown statistics in connection with small and medium size power installations. This consumer demanded 74.84 kw. hrs. per month for an average bill of \$2.31.

Table No. 11 contains information on power consumption by consumers served under exclusive transformer rate. Their monthly average consumption was 147.19 kw. hrs. for an average bill of \$6.84.

Table No. 12 shows the distribution of electric energy among all types of consumers. Energy distributed per bill issued was 81.54 kw. hrs. and the average bill was \$2.53.

Power Contracts.—Information relative to power contracts is analyzed by the Commercial Section of the Property and Accounting Division. This Division is in charge of this activities of the hydroelectric service installed at a purchase price of \$13,825.15.

Power Plant No. 3.—The construction of Power Plant No. 3 was authorized by the Legislature of Puerto Rico. During the year only preliminary work has been done, pending the corresponding authority to construct by the War Production Board.

PROPERTY AND ACCOUNTS

Direction and Supervision:

MR. BASILIO DEL PILAR -----Chief, Division of Property and
Accounts.

Accounting:

MR. ANGEL MOUNIER -----Bookkeeper.
MR. PEDRO A. DEL PILAR -----Clerk and Assistant Bookkeeper..

Commercial:

MR. WILLIAM F. CINTRÓN -----Billing Clerk.
MR. FÉLIX CHAVES BADÍA -----Clerk.
MR. JOSÉ DE JESÚS SUAZO -----Clerk.
MR. AGUSTÍN RIVERA -----Clerk.

Collection and Disbursements:

MR. ENRIQUE REDÓN -----Receiving Officer.
MR. ARTURO ABRAMS -----Special Disbursing Officer.
MISS VIRGINIA MARTÍNEZ MARTÍNEZ ---Clerk.

Property and Purchases:

MR. RAMÓN MOLINARI -----Property Clerk.
MR. ARTURO CAÑALS DE LA TORRE ---Clerk.

Transportation:

MR. RAFAEL MIRANDA -----Chauffeur-Mechanic.
MR. FRANCISCO GARCÍA AGUEDA -----Chauffeur.
MR. T LÉSPORO PRIETO HERNÁNDEZ ---Assistant Chauffeur.
MR. FAUSTINO HERNÁNDEZ -----Assistant Chauffeur.

File Room:

MRS. CANDITA MUÑOZ DE VALES -----File Clerk.
MRS. LYDIA GONZÁLEZ DE MUNERA ---Clerk.

PROPERTY AND ACCOUNTS

Power Contracts.—As shown under Tables 3 and 4 of the Hydroelectric System during the year under report were obtained the following results in connection with contracts issued and cancelled covering sale of electric energy:

Contracts issued under general rates-----	3, 724
Less: Contracts cancelled -----	3, 359
	<hr/>
Net increase for year-----	365
	<hr/>
Contracts issued under Rate No. 3-----	-
Less: Contracts cancelled-----	441
	<hr/>
Net loss for year-----	441
	<hr/>

SUMMARY

	General Rates	Rate No. 3 (Service without meter)	Total
Active contracts at beginning of year.....	8, 289	444	8, 733
Increase or decrease during year.....	+365	-441	-76
	<hr/>	<hr/>	<hr/>
Total at end of year.....	8, 654	3	8, 657
	<hr/>	<hr/>	<hr/>

It will be noted that a loss has been sustained under contracts pertaining to Rate No. 3 (electric service without meter), and this has been due to the fact that the electric service in this case is controlled thru the public lighting circuits, which have been subject to be switched out at any time on account of "black outs" ordered by Civil Defense. Hence, the customers affected solicited discontinuance of service with the result that at end of year there were only three active contracts out of a total of 1,126, which we had two years ago.

The increase in contracts pertaining to general rates is very low if compared with previous years' increases, but this is explained with the fact that due to present war conditions construction of electric lines, etc. is widely restricted.

Billing.—During the year there were issued 102,865 bills of all kinds for a total amount of \$298,678.22. These figures, if compared with last year's ones, will show a decrease of 836 in the number of bills and an increase of \$6,003.80 in the amount billed. A classification, by months, of all bills issued is shown under Table "A".

Collection.—Tables “D” and “E” of this Division show the collections made during the year for account of “Isabela Irrigation Fund-Trust Fund”, which were as follows:

Receiving Officer:

Power and water bills, etc.	\$290, 668. 71
-----------------------------	----------------

Collectors of Internal Revenues of Isabela and Aguadilla:

Water taxes, surcharges, etc.	21, 961. 08
-------------------------------	-------------

Treasurer of Puerto Rico (San Juan Office):

1/10% Special Tax (Act 120 of 1939)	398, 000. 00
-------------------------------------	--------------

Reimbursements, etc.	14, 345. 88
----------------------	-------------

Transfer from Insular Treasury	140, 000. 00
--------------------------------	--------------

Repayment by Special Disbursing Officer	14, 000. 00
---	-------------

Total Receipts	<u>\$878, 975. 67</u>
----------------	-----------------------

During the year there were issued 102,509 bills covering sale of electric energy for a net amount of \$248,250.01.

Diagram No. 6 of the Hydroelectric System and Table “D” of the Division of Property and Accounts show the results obtained in the collection of power bills, as follows:

Net amount billed	\$248, 250. 01
-------------------	----------------

Total collected up to June 30, 1943	218, 582. 48
-------------------------------------	--------------

Balance pending collection	\$29, 667. 53
----------------------------	---------------

Less: Amount collected in July, 1943, during which June bills are collected	19, 526. 31
---	-------------

Actual outstanding balance pending collection for year	<u>\$10, 141. 22</u>
--	----------------------

The last figure, as compared with the one for previous year, shows that during the year under report the actual outstanding balance is much lower.

As will be seen from the following tabulation less than one per cent (1%) remains uncollected from nonpayment of power bills by minor consumers ever since the operation of our Hydroelectric System was started some fifteen years ago.

Fiscal Year	Net amount billed for collection	Outstanding Balances Pending Collection	
		Amount	%
1927-28.....	\$3,884.61		
1928-29.....	33,300.21	30	
1929-30.....	41,355.17	199.98	.48
1930-31.....	45,237.16	172.88	.38
1931- (July-September).....	11,892.04	160.84	1.35
1931- (October) to 1934 (December) (1).....	179,990.31	834.98	.46
1935- (January-June).....	31,672.88	415.54	1.31
1935-36.....	75,984.15	429.07	.56
1936-37.....	96,690.18	1,405.61	1.45
1937-38.....	106,844.21	1,070.40	1.00
1938-39.....	121,974.87	745.64	.61
1939-40.....	141,250.81	1,007.15	.76
1940-41.....	192,467.21	1,461.62	.76
1941-42.....	255,068.20	3,685.91	1.44
1942-43.....	248,250.01	29,667.53	(2)
Average.....			0.86

NOTES:—

(1) The total for the period from October, 1931, to December, 1934, is shown in a lump sum because during that time our Hydroelectric System was operated by Utilization of the Water Resources and the billing and collection were carried on by that Organization.

(2) The percentage in this case is not given because the outstanding balance covers bills issued during the last month of the year and, in part, bills owed by municipalities, governmental agencies, commercial firms, etc., accrued during the last months of the year, which were not paid within the fiscal year, all of which will be collected during the coming year. Hence the percentage would not be representative.

Disbursements.—Table “B” of this Division shows that 457 disbursement vouchers were issued during the year, covering the following main items:

Current operating, maintenance and construction expenditures.....	\$217,990.75
Accrued accounts payable corresponding to previous years.....	6,379.58
Obligations: Payment of principal and interest.....	454,812.50
Reimbursement of Customers' Cash Bond Deposits.....	1,746.09
Total.....	\$680,928.72

The Special Disbursing Officer made cash payments out of Special funds in his possession, as follows:

General Special Fund of \$14,000:

Biweekly laborers payrolls.....	\$54,757.87
Accrued wages.....	358.05
Minor expense accounts.....	1,914.60
Traveling expense accounts of personnel.....	3,315.04
Total.....	\$60,355.56

Special Fund of \$1,000:

This Special Fund is dedicated to repay customers' cash bond deposits only, against which a total of \$1,746.09 was reimbursed during year.

Purchases.—This Service issued, during the year, the following requisitions and direct or service orders:

Requisitions to the Bureau of Supplies, Printing and Transportation	129
Direct or Service Orders	193

Unexpendable Property.—The following equipment was purchased during the year and classified as unexpendable property by the Office of the Honorable Auditor of Puerto Rico:

Hydroelectric System:

1 Transformer, 10 KVA, 240 volts	\$103.00
12 Transformers, 5 KVA	1,054.56
6 Watthour meters, 50 amperes	81.58
115 Watthour meters, 15 amperes	1,068.93
1,630 Watthour meters, 5 amperes	12,674.64
6 Transformers, 3 KVA	362.02
6 Linemen's rubber gloves size 11	25.35
6 Protective gloves for above	13.33
6 Linemen's rubber gloves size 10½	25.35
6 Protective gloves for above	13.33
6 Linemen's glove bags	9.17
1 Deadman wood pole 8 feet long	18.13
18 Machetes Collin, 28" long	16.69
1 Ground Testing Meter	45.74
1 Air Compressor with ½ H.P. electric motor	127.50
6 Tackle Blocks for Manila rope (motones)	28.68
12 Side cutting pliers, 8"	28.03
12 Linemen's tool belts	82.56
12 Linemen's safety straps	81.73
12 pairs climbers	49.17
12 sets safety straps and pads for climbers	41.26
1 Electric Grinder with ¼ H.P. motor	22.95
2 Round chisels, 1½ pounds	3.70
1 Screwdriver, Stanley, 12"	1.50
1 Open end wrench, 7/8" × 11/16"	1.00
1 Open end wrench, 1-1/4" × 1-1/16"	1.50
72 Pickmattocks, 4" × 20"	97.80
1 Open end wrench, 11/16" × 19/32" .....	.65
1 Open end wrench, 19/32" × 25/32" .....	.75
1 Stillson wrench No. 14	1.75
1 Stillson wrench No. 24	3.00
1 Bicycle "Excelsior" (second hand)	30.00
1 Chicago Pneumatic Rock Drill	154.50
1 Thor Clay Spade	128.75
12 Stone Forks, 12 teeth	28.64
18 Wheelbarrows, steel	90.58
6 Steel Sledges, 12 pounds	14.76
72 Shovels, round point	85.90
12 Steel Buckets, for concrete	19.57
<hr/>	
\$16,637.45	

Furniture and Equipment:

2 Steel Desk Card Files, double, 4" × 4"-----	\$10.30
1 25-lb. scale-----	3.32
6 Flags, American, 4' × 6'-----	28.74
2 Metallic Tapes, Lufkin No. 546-----	15.45
1 Auto Nash 600, Coupé 1942 model-----	1,135.49
1 Tee Square, 60" long-----	15.17
12 Auto Tires size 6.50 × 16-----	260.84
4 Truck Tires 32 × 6-----	147.08
1 Stillson Wrench No. 14-----	1.75
1 Stillson Wrench No. 24-----	3.00
1 Auto Tire Gauge, pencil type, 20-120 lbs.-----	4.50
10 Celluloid Triangles, various sizes-----	5.65
1 Celluloid Triangle, size 10-----	.57
12 Steel Sledges, 1 pound each-----	6.00
	<hr/>
	\$1,637.86
Total-----	<hr/>
	\$18,275.31

Transportation.—This Service operated ten vehicles, as follows:

One Buick Sedan, 5 pass., 1935 model,
 One Dodge Sedan, 7 pass., 1940 model,
 Two Ford Coupés, 1937 model,
 One Nash Coupé, 1942 model,
 Two Ford pickups, 1937 model,
 One Ford pickup, 1940 model,
 One Dodge truck, 1936 model,
 One Fordtruck, 1940 model.

This Service purchased, thru the Bureau of Supplies, Printing and Transportation, the auto Nash Coupé mentioned above for the sum of \$1,135.49.

These vehicles are used by the employees for inspection of regular operation and maintenance, and for inspection of field work.

Trips are effected by means of travel orders requested in advance. During the year 983 orders were issued.

The following table shows the unit cost and distance run per vehicle, for the last two years:

Auto	Mileage		Unit Cost	
	1941-42	1942-43	1941-42	1942-43
Buick IG-12.....	5,494 M....	6,230 M....	\$0.082	\$0.0782
Ford IG-48.....	16,823 KM....	11,837 KM....	.04	.05038
Dodge IG-49.....	3,732 M....	4,042 M....	.162	.1465
Ford IG-55.....	14,754 KM....	11,512 KM....	.041	.04998
Ford IG-60.....	19,718 KM....	19,125 KM....	.03	.053
Ford IG-61.....	19,736 KM....	19,173 KM....	.041	.04469
Ford IG-238.....	23,371 KM....	19,394 KM....	.064	.07689
Dodge IG-268.....	10,743 M....	8,184 M....	.082	.088174
Dodge IG-269.....	12,440 M....	10,162 M....	.073	.0476
Nash IG-412.....		10,139 M....		

Total operating and maintenance costs for this year amounted to \$7,305.13, which compares favorably with last years figure. These costs are distributed monthly among construction, operation, maintenance and sundry accounts in accordance with the distance run and object of trips.

Budget.—The annual budget for the Service, submitted by the Chief Engineer and approved by the Commissioner of the Interior and the Governor of Puerto Rico, amounted to \$635,020.02, and the total expenditures amounted to \$616,601.30, thus giving an available balance of \$18,418.72, as explained below:

Detail	Budget	Expenditures	Balance Available
OPERATION AND MAINTENANCE:			
Irrigation System.....	\$27,070.00	\$24,307.14	\$2,762.86
Hydroelectric System.....	58,292.00	59,805.69	—1,513.69
General Administration.....	41,770.00	43,636.70	—1,866.70
IMPROVEMENTS AND EXTENSIONS:			
Irrigation System.....	4,003.00	3,805.34	194.66
Hydroelectric System.....	20,000.00	20,039.19	—39.19
General.....	1,200.00	911.22	288.78
Obligations.....	459,812.50	459,468.73	343.77
Purchase of Tools, Machinery and Equipment....	3,750.00	2,246.88	1,503.12
Contingencies.....	19,125.52	2,380.41	16,745.11
TOTAL:	\$635,020.02	\$616,601.30	\$18,418.72

Bond Indebtedness.—As detailed under this heading in our Balance Sheet the bond indebtedness of the Service at the end of the fiscal year amounted to \$3,275,000, which is \$300,000 less than previous year's figure, decomposed as follows:

Operation Bonds:

Series "A" to "T", 1952-71.....	\$900,000 at 4½ per cent
Series "T" to "V", 1971-73.....	350,000 at 5 per cent

\$1,250,000

Refunding Bonds:

Series "A", 1935-1945-1974.....	\$75,000 at 4¼ per cent
Series "B", 1936-1946-1975.....	75,000 at 3 per cent
Series "C", 1937-1976.....	75,000 at 3½ per cent

\$225,000

Consolidation Bonds:

P. R. 2½ per cent Isabela Irrigation Consolidation Bonds, 1940-49-----	\$2,625,000
Less: Amortizations:	
January 1, 1940-----	\$25,000
January 1, 1941-----	200,000
January 1, 1942-----	300,000
January 1, 1943-----	300,000
	<hr/> 825,000
	<hr/> \$1,800,000
Total Bond Indebtedness-----	<hr/> <hr/> \$3,275,000

The actual disbursements during the year in connection with the amortization of bonds and interest thereon were as follows:

	1st Semester	2nd. Semester
Forth amortization of 2-1/2% Consolidation Bonds.....	\$300,000.00	.....
Interest on Bonded Debt.....	59,281.25	\$ 55,531.25
Total.....	\$359,281.25	\$55,531.25
To defray this sum, funds were obtained from the following sources:		
Proceeds of Special Tax of 1/10 of 1% on all real and personal property of the Island, as per Act No. 120, approved May 5, 1939.....	\$158,000.00	\$240,000.00
Transfer from Insular Treasury.....	\$140,000.00	.....
Total.....	\$298,000.00	\$240,000.00
DIFFERENCES.....	\$61,281.25	\$184,468.75

In the first semester the proceeds from the Special Tax was not sufficient to cover the total amount due, and it was necessary to make a temporary transfer of funds from the Insular Treasury. The difference shown was defrayed out of the Service's funds.

In the second semester the proceeds of the Special Tax was in excess of the amount required for paying interest charges, and the resulting difference will be applied during the coming fiscal year to repay the temporary transfer referred to.

The sum of \$40,000 was also paid out of the Service's funds to reimburse, in part, the loan made by the Treasury Department on December 8, 1931.

It will be seen from the above figures that this Service contributed with the sum of \$56,000 for defraying the foregoing obligations.

Accounting.—During the year the following documents were issued, audited and registered in the general books of account:

- 457 disbursement vouchers,
- 102,865 credit vouchers (power, water and general bills), and
- 193 journal vouchers covering cash and general transactions.

The accounting exhibits appearing in this report, which are described below, show the financial condition of the Organization and the business results of the year under report.

Exhibit "A"—This statement shows the cash receipts and disbursements during the year pertaining to "General Fund". Cash receipts from all sources, including \$33,206.38 at the beginning of the year, amounted to \$912,182.05. The net cash disbursements amounted to \$688,770.30, thus leaving a cash balance with the Treasurer of Puerto Rico at the end of the year of \$223,411.75, of which the sum of \$6,880.20 covering vouchers payable in transit should be deducted, leaving a balance of cash available of \$216,531.55.

Exhibit "B"—This statement shows the condition of the Service at the end of the fiscal year.

The "Fixed Assets" were affected as follows:

Transfer from "Deferred Assets" to Investment "Power Plant No.

2" of amount spent in its construction on previous year----- \$53,410.88
Construction works during Year:

Power Plant No. 2-----	\$724.53	
Irrigation System-----	2,232.10	
Hydroelectric System-----	15,427.34	
General-----	911.22	19,295.19
		<hr/>
		\$72,706.07

LESS: Value reimbursed of properties occupied by

Borinquen Air Base-----	11,027.45	
Property dismantled, etc.-----	518.50	11,545.95
		<hr/>
Net Increase-----		\$61,160.12

Current Assets, if compared with previous year's figures, show an increase of more than \$217,000 due primarily to the great increase in cash account and in inventories of materials and supplies.

Available current assets cover in excess the current liabilities, leaving an available margin of over \$350,000.

Total of "Deferred Assets", if compared with last year's figure, show a decrease of more than \$35,000, which is explained principally by the transfer of amount corresponding to "Construction of Power Plant No. 2" to proper investment account, and increase in expenditures pertaining to "Construction of Power Plant No. 3".

Total Assets show an increase of more than \$200,000 over last year's figure.

The "Liability" side shows, in the first instance, a detail of the bond indebtedness and also other fixed obligations of the Service.

The bond indebtedness was reduced in the amount of \$300,000, which represents the fourth amortization of the 2½% Consolidation Bonds.

The Insular Treasury Temporary Loans account shows an increase of \$100,000 over last year's figure, due to the new loan of \$140,000, less payment made of \$40,000 on the loan made on December 8, 1931.

Current Liabilities remained practically the same as previous year.

Total Liabilities show a decrease of over \$200,000 if compared with last year's figure.

Exhibit "C" shows the operation and maintenance expenses, including the depreciation charges of the different features of the Organization, and interest charges on the bonded debt. This statement supports expense figures of the Income Statement, Exhibit "D".

The following statement shows a detailed distribution of the amounts appearing in said Exhibit "C", segregating depreciation charges during the year.

Account	Direct Expense	Depreciation	Total
IRRIGATION SYSTEM:			
OPERATING EXPENSES:			
Guajataca Reservoir.....	\$1,443.23	\$613.98	\$829.25
Diversion Canal.....	950.21	36.61	913.60
Distribution System.....	11,838.59	1,070.58	10,768.01
	\$14,232.03	1,721.17	\$12,510.86
MAINTENANCE EXPENSES:			
Guajataca Reservoir.....	\$358.48		\$358.48
Diversion Canal.....	2,887.64		2,887.64
Distribution System.....	8,557.26		8,557.26
	\$11,803.38		\$11,803.38
TOTAL, OPERATION AND MAINTENANCE	\$26,035.41	\$1,721.17	\$24,314.24
HIDROELECTRIC SYSTEM:			
OPERATING EXPENSES:			
Power Plant No. 1.....	\$13,618.34	\$4,766.71	\$8,851.63
Power Plant No. 2.....	10,917.32	4,902.80	6,014.52
Substations.....	1,517.83	1,223.15	294.68
Transmission Lines.....	7,565.33	6,202.26	1,363.07
Distribution System:			
Primary Distribution Lines.....	2,846.68	517.83	2,328.85
Secondary Distribution Lines.....	34,687.76	15,385.06	19,302.70
Meter and Transformer Operation.....	3,054.27	56.69	2,997.58
Lease of Municipal Distribution Systems.....	3,500.00		3,500.00
Compensation to Municipalities.....	11,074.55		11,074.55
Interconnections.....	125.94		125.94
Purchase of Electric Energy.....	983.97		983.97
	\$89,891.99	\$33,054.50	\$56,837.49
MAINTENANCE EXPENSES:			
Power Plant No. 1.....	\$442.54		\$442.54
Power Plant No. 2.....	201.29		201.29
Substations.....	111.12		111.12
Transmission Lines.....	260.44		260.44
Distribution Lines:			
Primary Distribution Lines.....	1,809.48		1,809.48
Secondary Distribution Lines.....	1,654.35		1,654.35
	\$4,479.22		\$4,479.22
TOTAL, OPERATION AND MAINTENANCE	\$94,371.21	\$33,054.50	\$61,316.71
GENERAL ADMINISTRATION:			
OPERATING EXPENSES:			
Main Headquarters.....	\$2,320.23	\$2,206.74	\$113.49
Telephone Lines.....	823.30	354.55	468.75
Garage.....	1,828.51		1,828.51
General Warehouse.....	2,840.35		2,840.35
Executive Division.....	6,090.10		6,090.10
Accounting Division.....	22,845.46		22,845.46
General Expenses.....	6,453.49	1,025.15	5,428.34
	\$46,201.44	\$3,586.44	\$42,615.00
MAINTENANCE EXPENSES:			
Main Headquarters.....	\$1,396.89		\$1,396.89
Telephone Lines.....	487.10		487.10
	1,883.99		\$1,883.99
TOTAL, OPERATION AND MAINTENANCE	\$48,085.43	\$3,586.44	\$44,498.99
GRAND TOTAL	\$168,492.05	\$38,362.11	\$130,129.94

Exhibit "D" shows all revenues and expenses, as well as the final result of operation for the year.

The gross sale of electric energy during the year amounted to \$259,324.56 which compared with last year's figure of \$269,244.81 shows a decrease of \$9,920.25. If the purchase of electric energy in the amount of \$19,775.55 during previous year from the interconnected system for resale is considered, it will be noted that the sale during the year under report has increased in a total of \$9,855.30, notwithstanding the present war emergency which makes it impossible to construct additional service lines, and furthermore, consumers cannot obtain electrical appliances, etc.; all of which has affected the natural development of our hydroelectric system.

The gross income of this Organization, exclusive of interest expense, amounted to \$531,181.08, and after deducting interest charges totalling \$125,238.68, leaves a net surplus for the year of \$405,942.40 against \$326,667.69 and \$228,846.39 for previous two years' operations.

This increased volume of business has been due primarily to the increase in the proceeds of the Special Tax of one-tenth of one per cent imposed upon all taxable property in the island, as per Act No. 120 of May 5, 1939.

The operating profit of the Irrigation and Hydroelectric Systems remained practically the same.

The net deficit at the end of the year amounted to \$564,360.67, which is \$411,752.96 less than the net total brought from last year's operations.

Exhibit "E" shows a detailed distribution of the cost of the different construction works, improvements and extensions carried out during the year and commented under Exhibit "B".

ORGANIZATION AND PERSONNEL

The organization of the Service at the end of the fiscal year 1942-43, with divisions and positions, is given below:

Divisions and Positions	No. of Positions	Divisions and Positions	No. of Positions
EXECUTIVE DIVISION:		IRRIGATION DIVISION:	
Chief Engineer.....	1	Chief of Division & Asst. Chief Engineer..	1
Clerk.....	1	Asst. Civil Engineer.....	1
File Clerk.....	1	Division Clerk.....	1
Asst. File Clerk.....	1	Clerks.....	2
		Ditchriders.....	9
	4	Overseer, Operation and Construction.....	1
		Overseer, General Construction.....	1
PROPERTY & ACCOUNTS:		Gate Tender and Canal Patrolman.....	1
Chief of Division.....	1	Mechanic-Blacksmith.....	1
Bookkeeper.....	1	Laborers (Average).....	32
Property Clerk.....	1		50
Receiving Officer.....	1		
Special Disbursing Officer.....	1	HYDROELECTRIC DIVISION:	
Clerk, Billing.....	1	Chief of Division.....	1
Clerks.....	10	Electrical Engineer.....	1
Clerk & Asst. Bookkeeper.....	1	Assistant Electrical Engineers.....	2
Telephone Operator.....	1	Division Clerk.....	1
Chauffeur-Mechanic.....	1	Clerks.....	3
Chauffeurs.....	3	Chief Plant Operator.....	1
Truck Driver.....	1	Plant Operators.....	6
Messenger.....	1	Plant Operators (At Large).....	2
Watchmen.....	3	Oil rs.....	6
Laborers.....	2	Watchmen at Plants.....	2
	29	Overseer, Operation and Construction.....	1
		Asst. Line Foreman.....	1
		Linemen.....	5
		Assistant Lineman.....	1
		Assistant Mechanic.....	1
		Town Patrolmen.....	10
		Meter Tester.....	1
		Laborers (Average).....	33
			78

SUMMARY

Division	Classification of Positions					
	Permanent	Tempo- rary	Skilled Laborers	Laborers	Vacancies	Total
Executive.....	3		(1)		1	4
Property & Accounts.....	16		11	2		29
Irrigation.....	17		1	32		50
Hydroelectric.....	19	2	17	33	7	78
Totals.....	55	2	29	67	8	161

CLASSIFICATION OF POSITIONS

	Annual Salaries		
Chief Engineer-----			\$5,000
Chief of Divisions-----	\$3,300	to	3,600
Assistant Administrative Officers-----	900	to	1,980
Assistant Engineers (Civil Electrical)-----	1,800	to	2,200
Clerical Positions-----	400	to	1,380
Chief Plant Operator-----			2,200
Plant Operators-----	840	to	1,050
Plant Oilers-----			600
Line Foremen-----			1,000
Lineman-----	600	to	900
Town Patrolmen and Collectors-----	840	to	900
Meter Tester-----			900
Overseers, Operation and Construction-----	1,380	to	1,600
Ditchriders and Gate Tender-----	600	to	720
Chauffeurs, Chauffeur-Mechanic and Mechanic-Blacksmith--	720	to	1,080
Camp Watchmen, Messenger, Janitors and Gardeners-----	450	to	480
Skilled Laborers (Day Basis)-----	1.65	to	10
			a day
Unskilled Laborers-----	15 cents	to	
	40 cents	per hour.	

CIVIL SERVICE

During the year there were made no appointments. Three employees resigned their positions, all of which had permanent appointments. Two employees were promoted and salaries were increased.

The Organization was composed at the end of the year of 161 positions, classified as follows:

With permanent appointments	55
With temporary appointments authorized by the Civil Service Commission	2
Skilled Laborers	29
Laborers	67
Vacancies	8
<hr/>	
Total positions	161

The fifty-five permanent employees are classified as follows considering their status as members of the Savings and Loan Fund Association of the Employees of the Insular Government of Puerto Rico:

Full members of the first category	11
Full members of the second category	20
Members accepted for savings only on account of being over 50 years old	6
Members accepted for savings only, due to other causes	2
Members enjoying benefits of savings only	16
<hr/>	
Total Permanent Employees	55

During the year there were granted three hundred and fourteen leaves of absence, classified as follows:

303 Vacation leaves covering	1,040	days
11 Sick leaves	149½	days
<hr/>		
		1,189½ days

GENERAL FILES

The employees in charge of the file section attend to the incoming and outgoing mail of the Organization. All mail pieces received are time stamped, recorded, referred to proper officials for attention and finally filed.

During the year there were received 6,953 pieces of assorted mail and 1,645 letters were mailed, as follows: 760 originated by the Service and 885 written in reply to communications received.

All valuables, including checks, money orders, cash, etc., are also received by said employees, who issue daily reports to cover same. These reports, together with the corresponding valuables, are delivered to the Receiving Officer, in the case of collections, and to the Special Disbursing Officer, when checks are received from the Treasury Department in payment of disbursement vouchers issued and authorized by the Service.

There were issued 523 of said reports during the year, 435 covering collections and 88 covering checks to be delivered to creditors of the Service.

The file room issued also weekly bulletins covering letters, documents, etc., not returned to files by the corresponding officials.

LEGISLATION

The 15th Legislature of Puerto Rico, in its regular session of the year 1943, passed one bill which was approved by The Honorable, The Governor of Puerto Rico on May 10, 1943, and converted into the following act:

Act No. 58.—To appropriate the sum of twenty thousand (20,000) dollars from the funds of the Treasury of Puerto Rico, in order to continue irrigation and hydroelectric surveys in the district included between the Guajataca River, on the west, and the municipal boundary between Hatillo and Arecibo, on the east, including the irrigable lands in the municipalities of Hatillo, Camuy, and Quebradillas, and for other purposes.

INDEX

	Pages
Tables and Diagrams of the Hydroelectric System—(Tablas y Diagramas del Sistema Hidroeléctrico)-----	157-180
Tables and Exhibits of the Division of Property and Accounts (Tablas y Anexos de la División de Propiedad y Cuentas)-----	181-200
War Emergency Program-----	201-202
Service of Claims, Advice and Legal Assistance-----	203-205
Insular Sewerage Service-----	206-207

TABLES AND DIAGRAMS
OF THE
IRRIGATION SYSTEM

TABLAS Y DIAGRAMAS
DEL
SISTEMA DEL RIEGO

IRRIGATION SYSTEM

SISTEMA DE RIEGO

TABLE NO. II

TABLA NO. II

GUAJATACA RESERVOIR
WATER STORED, DIVERTED
AND WASTED TO SEA

EMBALSE GUAJATACA
AGUAS ALMACENADAS, TRANSVA-
SADAS Y DERRAMADAS AL MAR

FISCAL YEAR	ACRE - FEET			
	Run-off	Diverted	Wasted to sea	Available on June 30
AÑO FISCAL	ACRE - PIES			
	Aportados	Derivados	Derramados al mar	Disponibles en Junio 30
1927-28				11,980
1928-29	98,467	57,215	49,332	3,900
1929-30	61,074	62,074	0	2,900
1930-31	69,339	47,739	0	24,500
1931-32	55,759	61,439	380	18,440
1932-33	101,784	64,476	33,766	21,980
1933-34	62,794	68,034	0	16,740
1934-35	80,022	59,712	60,075	30,475
1935-36	97,859	69,354	28,380	31,100
1936-37	53,148	68,992	1,506	13,750
1937-38	72,929	65,619		21,060
1938-39	72,053	69,881	2,842	20,390
1939-40	76,178	76,148	0	19,420
1940-41	74,718	77,718	0	16,420
1941-42	85,002	82,886	36	18,800
1942-43	84,595	83,151	7,004	13,340

IRRIGATION SYSTEM

TABLE III

WATER SOLD, DELIVERED AND RELINQUISHED UNDER
THE TERMS OF ACT No. 178 APPROVED
MAY 14, 1941

SISTEMA DE RIEGO

TABLA NO. III

AGUA VENDIDA, ENTREGADA Y CADUCADA DE
ACUERDO CON TERMINOS DE LA LEY No. 178,
APROBADA EN MAYO 14, 1941

Classification	Balance 1941-42	Orders issued	Amount Sold A. F.	Unit price	Total Value	Delivered Acre-Feet				Relin- quished A. F.	Balance
						By Gravity	By pumps	Tol- erances	Total		
Classification	Balance 1941-42	Ordenes expedi- das	Canti- dad vendida A. F.	Precio unitario	Importe	Por gravedad	Bom- beada	Tol- erancias	Total	Cadu- cada A. F.	Balance
PARCELS INCLUDED AND QUOTA PAID: By Gravity..... Mantilla Pump..... Guerrero Pump.....	81.67	50	18.10	\$2.00	137.80	108.22	.....	+0.17	108.39	26.00	16.18
PARCELS INCLUDED AND QUOTA NOT PAID: By Gravity..... Mantilla Pump..... Guerrero Pump.....	10.04	67	96.50	2.50	241.25	80.97	.....	-0.02	80.95	10.21	15.38
PARCELS NOT INCLUDED: By Gravity..... Mantilla Pump..... Guerrero Pump.....	2.80	20	68.80	2.50	47.00	17.26	.....	+0.02	17.28	2.50	1.82
TOTALS.....(TOTALES).....	94.51	137	184.20	.....	426.05	206.45	.....	+0.17	206.62	38.71	33.38

IRRIGATION SYSTEM

SISTEMA DE RIEGO

TABLE No. IV

TABLA No. IV

SALES OF IRRIGATION WATER UNDER THE TERMS OF ACT No. 178
APPROVED
MAY 14, 1941

VENTAS DE AGUA PARA FINES DE RIEGO DE ACUERDO CON LOS
TERMINOS DE LA LEY No. 178
APROBADA EN MAYO 14, 1941

Month	Amount Sold Acre-Feet	Delivery Acre-Feet				Relin- quished Acre-Feet	Balance to Credit of Water Users Acre-Feet
		By Gravity	By Pumps	Tole- rances	Actual Delivery		
Mes	Cantidad Vendida Acre-Pies	Entrega Acre-Pies				Caducada Acre-pies	Balance a Favor del Agricultor Acre-Pies
		Por Gravedad	Por Bombas	Tole- rancias	Entrega Neta		
1942							
June.....							94.51
July.....	15.90	35.72		0.17	35.89	7.91	66.61
August.....	5.60	4.49			4.49	3.05	64.67
September.....	6.20	14.38		0.02	14.40	11.35	45.12
October.....	.60	18.48		0.01	18.49	9.65	17.58
November.....	2.20	2.50		0.01	2.51	1.63	15.64
December.....	0	6.18		0.03	6.15	1.26	8.23
1943							
January.....	7.20	6.47		0.05	6.52	2.97	5.94
February.....	11.90	12.76		0.01	12.77	.20	4.87
March.....	75.10	51.75			51.75	.40	27.82
April.....	11.70	12.16		0.04	12.12	.29	27.11
May.....	4.50	7.81			7.81		23.80
June.....	43.30	33.75		0.03	33.72		33.39
Totals (Totales)...	184.20	206.45		0.17	206.62	38.71	33.39

IRRIGATION SYSTEM

TABLE No. IV-A

ALLOTMENT WATER SERVED UNDER TERMS OF
ACT No. 178 APROVED ON MAY 14, 1941

SISTEMA DE RIEGO

TABLA No. IV-A

SERVICIO DE AGUA POR DOTACION CONFORME
A LOS TERMINOS DE LA LEY No. 178 APRO-
BADA EN MAYO 14, 1941

Month	Allotment Acre-Feet	Delivery in Acre-Feet			Offered but not Used	Excess Delivery to Deduct	Balance to Credit of Water Users Acre-Feet
		By Gravity	By Pumps	Total			
Mes	Dotación Acre-Pies	Entrega en Acre-Pies			Ofrecida pero no Usada	Exceso a Deducir	Balance a Favor del Agricultor Acre-Pies
		Por Gravedad	Por Bombas	Total			
1942							
June 30.....							147. 06
July.....	678. 80	421. 20		421. 20	404. 66		404. 66
August.....	678. 80	213. 68	112. 72	326. 40	352. 40		756. 06
September.....	678. 80	130. 60	3. 04	133. 64	545. 16		1,302. 22
October.....	678. 80	34. 00		34. 00	644. 80		1,947. 02
November.....	678. 80	38. 70		38. 70	640. 10		2,587. 12
December.....	678. 80	36. 44		36. 44	642. 36		3,229. 48
1943							
January.....	678. 80	143. 53	17. 26	160. 79	518. 01		3,747. 49
February.....	678. 80	142. 94	30. 63	173. 57	505. 23		4,252. 72
March.....	678. 80	244. 04	94. 29	338. 33	340. 47		4,593. 19
April.....	678. 80	110. 20	. 83	111. 03	567. 77		5,160. 96
May.....	678. 80	128. 29	8. 82	137. 11	541. 69		5,702. 65
June.....	678. 81	517. 73	7. 19	524. 92	120. 19		5,856. 54
Totals (Totales)...	8,145. 61	2,161. 35	224. 78	2,436. 13	5,822. 84	.....	33,70

Allotment waters not used during the year are relinquished on June 30.
Aguas de dotación no usadas durante el año caducan en junio 30.

IRRIGATION SYSTEM

SISTEMA DE RIEGO

TABLE NO. V

TABLA NO. V

SOUTH VALLEY PUMPING UNITS
OPERATING DATAUNIONAMIENTO DE LAS
ESTACIONES DE BOMBEO
DEL VALLE DEL SUR

FACTORS		PUMP	
		Mantilla	Guerrero
FACTORES		BOMBA	
		Mantilla	Guerrero
MANUFACTURER'S RATING:	DATOS DE FABRICA		
Pump:	Bomba:		
Type.....	Tipo.....	Centrifugal...	Centrifugal
Capacity:	Capacidad:		
G. P. M.....	G. P. M.....	1,100	3,600
C. F. S.....	P. C. S.....	2.5	8.0
Head (ft.).....	Carga Hidrostática (Pies).....	57.4	88.0
Electric Motor:	Motor Eléctrico:		
Type.....	Tipo.....	Induction.....	Induction
		Inducción.....	Inducción
H. P.....	Caballos de Fuerza.....	20.	100.0
R. P. M.....	R. P. M.....	1,740.	1,750.
PERFORMANCE:	RESULTADOS PRACTICOS:		
Discharge:	Caudal:		
Maximum obtained (C.F.S.).....	Maximo obtenido (P.C.S.).....	2.00	5.10
Mean (C. F. S.).....	Promedio (P. C. S.).....	1.99	3.04
Total (Acre-Feet).....	Total (Acre-Pies).....	34.29	261.16
Time Worked (Hou:s).....	Tiempo Trabajado (Horas).....	208.00	755.
Head (Feet).....	Carga Hidrostática (Pies).....	56.20	87.50
Water Horse Power.....	Rendimiento (C. de F.).....	12.70	32.29
Consumption (K. W. Hrs.).....	Consumo (K. V. Hrs.).....	3,102.00	65,040.
Consumption (K. W.).....	Consumo (K. V.).....	14.94	86.14
Consumption (H. P.).....	Consumo (C. de F.).....	20.02	115.43
Efficiency (%).....	Eficiencia (%).....	63.00	36.

TOTALS FOR THE TWO UNITS:

TOTALES PARA LAS DOS UNIDADES:

Discharges 295.45 (Acre-Feet)..... Caudal 295.45 (Acre-Pies)
 Consumption 68,142. (K. W. Hrs.)... Consumo..... 68,142. (K. V. Hrs.)

IRRIGATION SYSTEM

TABLE NO. VI

LAWS PROVIDING METHOD OF DETERMINING IRRIGATION TAXES LEVIED

ORIGINAL	AMENDATORY				SPECIAL		
	29 4/21/28	J. R. No. 12 7/3/29	96 5/15/31	70 5/15/34	78 5/12/36	146 5/15/37	178 5/14/41
Temporary District 1st. Yr.—Nothing Succeeding Years— Not over \$1.00	Temporary District 1st. Yr.—Nothing Succeeding Years— \$10.00	1st. Yr.—Nothing 2nd. Yr.—\$6. 3rd. Yr.—12.00 4th. Yr.—13.00 5th. Yr.—15.00 Succeeding Yrs.— Not over \$15.00	1st. Yr.—Nothing 2nd. Yr.—\$6.00 3rd. Yr.—6.00 4th. Yr.—7.00 5th. Yr.—8.00 6th. Yr.—9.00 7th. Yr.—15.00 Succeeding Yrs.— Not over \$15.00	1st. Yr.—Nothing 2nd. Yr.—6.00 3rd. Yr.—6.00 4th. Yr.—7.00 5th. Yr.—8.00 6th. Yr.—9.00 7th. Yr.—6.00 8th. Yr.—6.00 9th. Yr.—6.00 10th. Yr.—6.00 11th. Yr.—6.00 12th. Yr.—10.00 13th. Yr.—11.00 14th. Yr.—12.00 15th. Yr.—13.00 16th. Yr.—14.00 17th. Yr.—15.00 Succeeding Yrs.— Not over \$15.00	Suspending until June 30, 1941 section No. 29 of the Isabela Public Irrigation Law as amended and afterwards amended and establishing during said suspension the Optional Plan which provides the levying of a tax or quota amount of \$1.00 per acre per year plus the value of the water delivered to the farm for the benefit to the land calculated at the rate of \$1.00 per acre-foot.	Readjusting the indebtedness of the water users accumulated up to June 30, 1936, in such a way as to cancel the same if payment in advance be made for the amount of \$1.00 per acre per year plus the value of the water delivered to the farm for the benefit to the land calculated at the rate of \$1.00 per acre-foot.	Suspending until June 30, 1931, section No. 29 of the Isabela Public Irrigation Law, as amended afterwards, and establishing during said period of suspension a plan with provision for the levying of a tax or quota and sales of water as follows: Plots with 10 acres or less, \$1.00 per acre per year. With right to purchase water. Plots with more than 10 acres included, \$1.00 per acre per year for the first 10 acres, and \$4.00 per acre for all excess above first 10 acres with the water donation of 1½ acre-foot per acre per year and the right to purchase water if needed. Price of water: \$2.00 per acre-foot to plots with quotas paid up and \$2.50 to plots with quotas unpaid.
Permanent District 1st. Semester— Not over \$12.00 Succeeding Years— Assessment as per tax-roll	Permanent District 1st. three years— Not over \$12.00 Succeeding Years— Not over \$17.00						

METHOD OF DETERMINING THE TAX ROLL PROVIDED BY VIRTUE OF ACT NO. 63 AND AMENDATORY LAWS:—Adding the amortization, interest and operation and maintenance expenses; adding or subtracting the deficit or surplus of the previous year; subtracting the receipts from the hydroelectric plant less the amount deducted for the development and extension of the same; subtracting any other revenues; and adding 2% of this total as margin of safety on delay collections; and the amount resulting distributed proportionally between the different acres under irrigation. Joint Resolution No. 12 and acts No. 96 and 70 provided the necessary arrangements to cover the annual deficit resulting between this tax roll and the main quota provided by said laws.

SISTEMA DE RIEGO

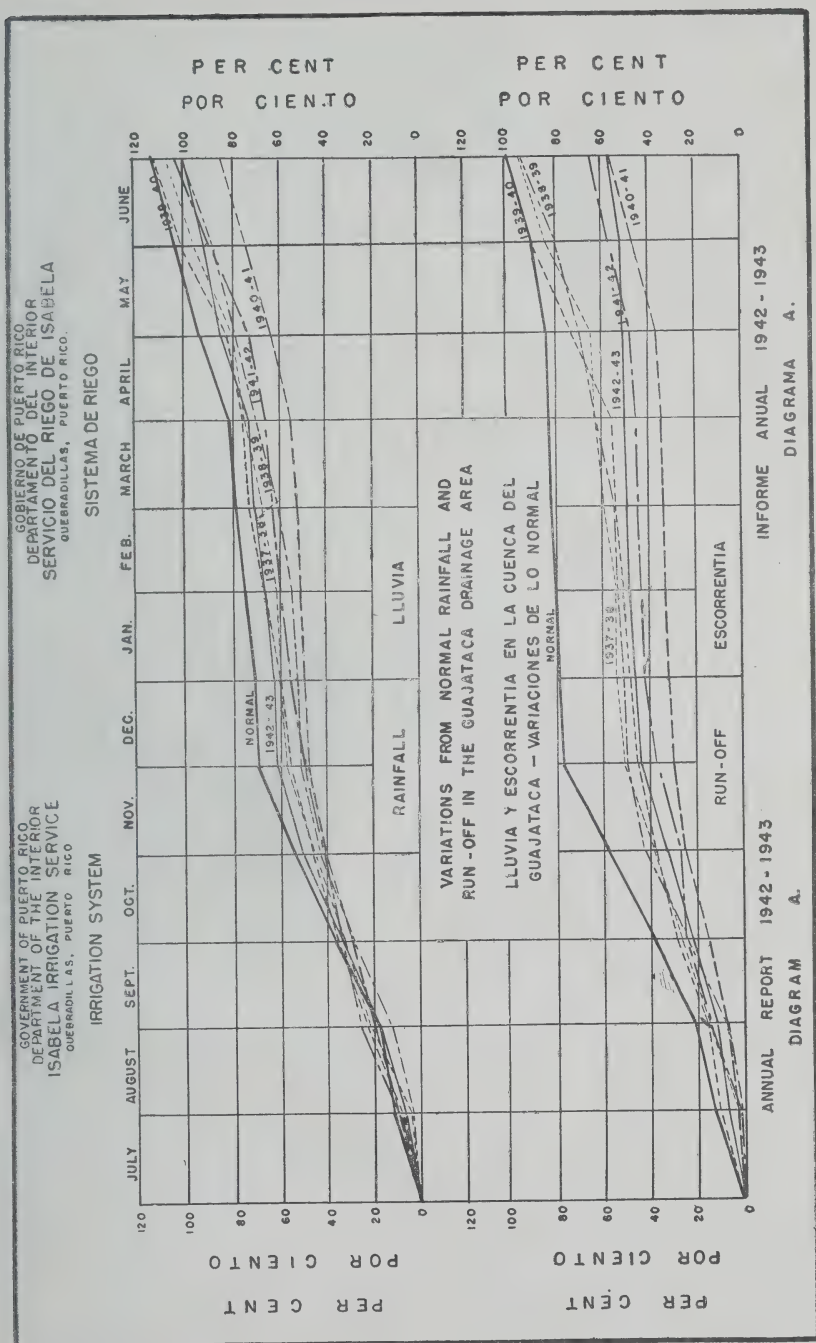
TABLA No. VII

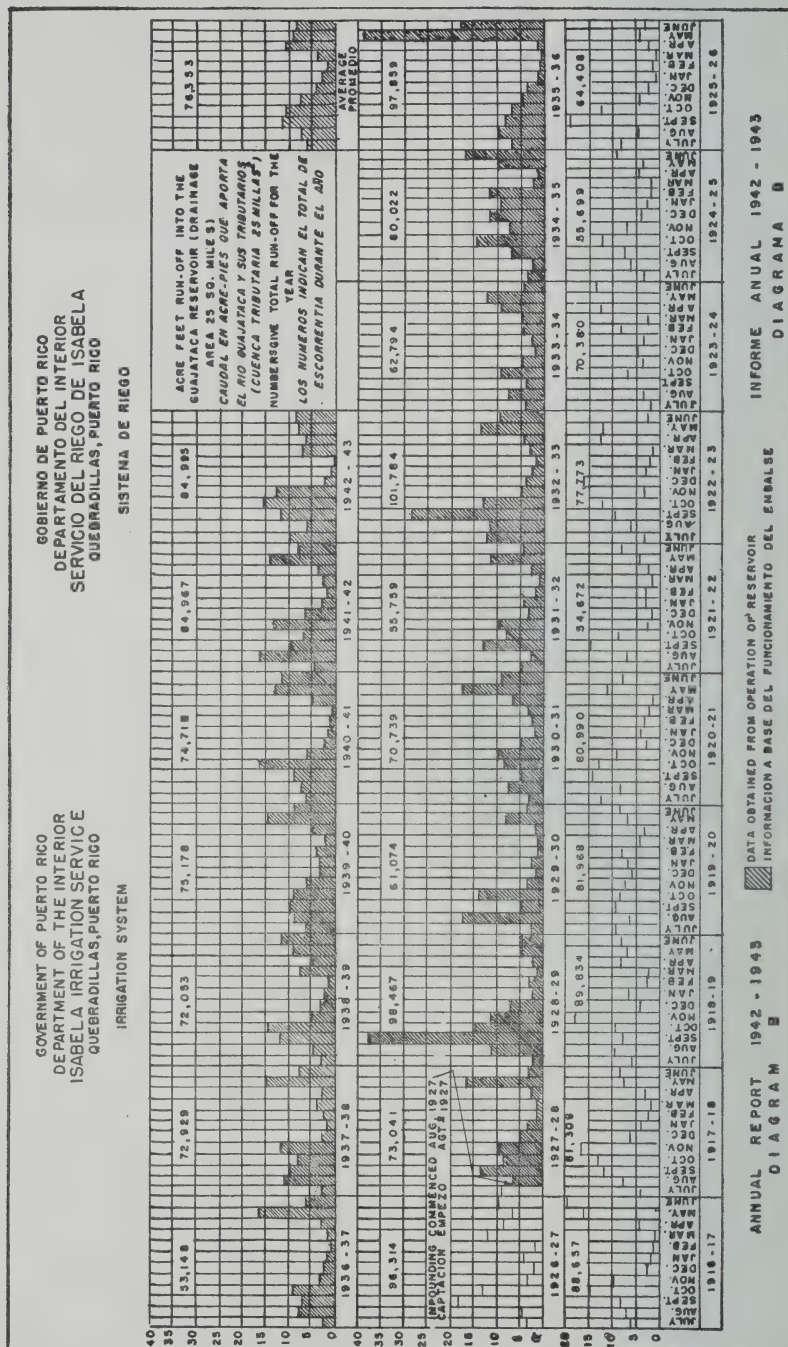
INGRESOS DEL SISTEMA DEL RIEGO

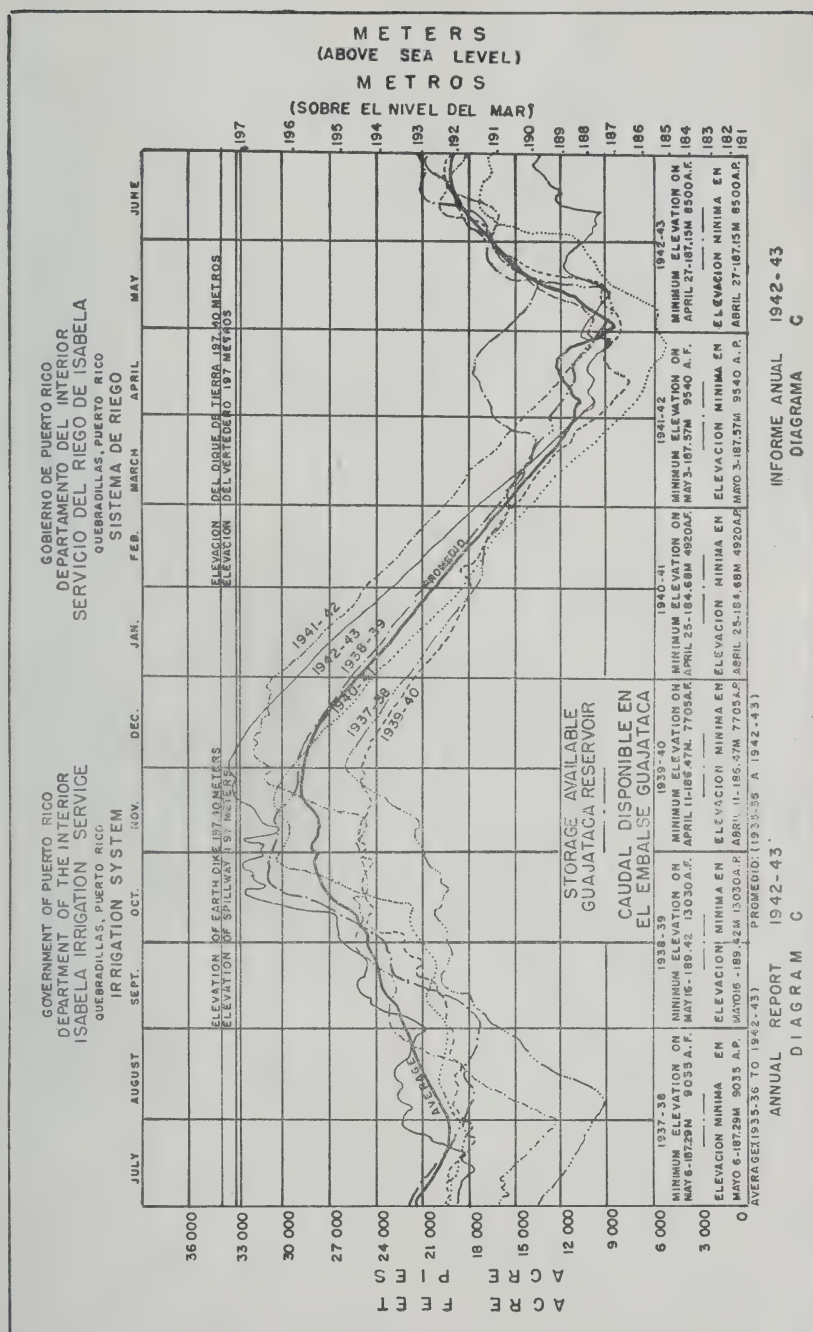
INCOME		INGRESOS DEL SISTEMA DEL RIEGO			
Period	Y (P)	Sales of Water			Income
		For Irrigation Act No. 78 of May 12, 1936	For Irrigation Act. No. 178 of May 14, 1941	For Water- works, Residences and Indus- trial Users	
Período	A (P)	Ventas de Agua			Total Ingresos
		Para Riego Ley No. 78 de mayo 12, 1936	Para Riego Ley No. 178 de mayo 14, 1941	Para Acueductos y fines Domésticos e Industriales	
1st. (1°)....	1928	.....	.....	.....	\$ 6.25 \$306.57
1st. (1°)....	1929	.....	.....	\$3.00	702.71 19,614.58
1st. (1°)....	1930	.....	.....	19.51	19.51 6,896.38
1st. (1°)....	1931	.....	.....	37.83	55.92 12,252.73
1st. (1°)....	1932	.....	.....	22.61	32.97 386.50
1st. (1°)....	1933	.....	.....	49.74	49.74 834.63
2nd. (2°)...	1934	.....	.....	52.35	61.35 43,249.64
2nd. (2°)...	1935	.....	.....	47.66	261.10 35,855.96
3rd. (3°)....	1936	\$16,475.98	.....	174.15	16,650.13 53,652.11
3rd. (3°)....	1937	20,555.86	.....	745.73	21,301.59 38,080.90
3rd. (3°)....	1938	5,902.17	.....	1,034.95	6,937.12 23,603.46
3rd. (3°)....	1939	4,092.60	.....	2,454.03	6,546.63 38,209.92
3rd. (3°)....	1940	4,678.65	.....	2,700.03	7,378.68 27,951.89
4th. (4°)...	1941	.....	\$1,709.45	8,086.73	9,796.18 33,451.65
4th. (4°)...	1942	.....	426.05	13,875.36	14,301.41 34,606.17
Totals....	(T)	\$51,705.26	\$2,135.50	29,303.68	\$84,101.29 \$368,953.09

INCOME FROM THE IRRIGATION SYSTEM

INGRESOS DEL SISTEMA DEL RIEGO







GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO

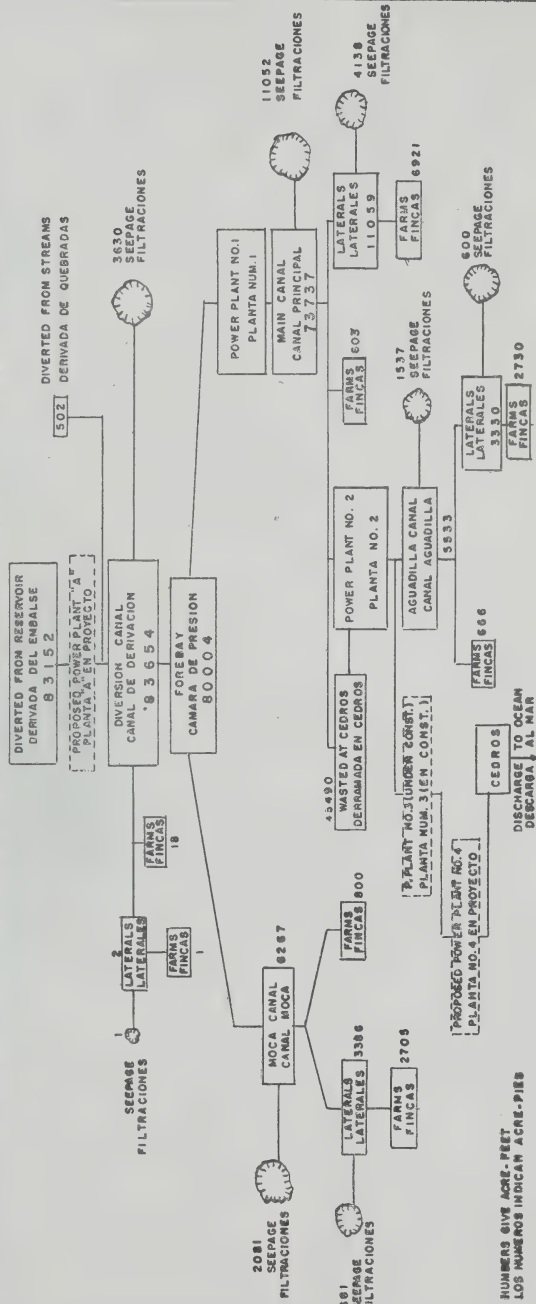
IRRIGATION SYSTEM

FLOW AND DISTRIBUTION OF WATER DIVERTED FROM THE GUAJATACA RESERVOIR

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO

SISTEMA DE RIEGO

CURSO Y DISTRIBUCION DEL AGUA DERIVADA DEL ENBALSE GUAJATACA



NUMBERS GIVE ACRE-FEET
LOS NUMEROS INDICAN ACRE-PIES

ANNUAL REPORT 1942-43
DIAGRAM E.

INFORME ANUAL 1942-43
DIAGRAMA E.

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO

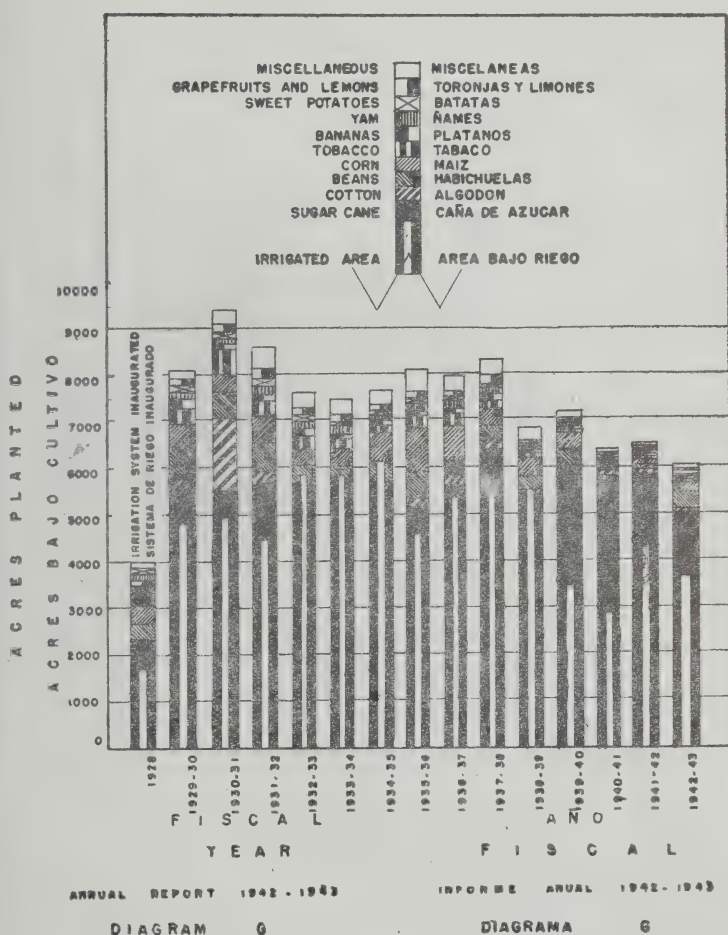
GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO

IRRIGATION SYSTEM

SISTEMA DE RIEGO

CROP CENSUS

CENSO DE COSECHAS



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO

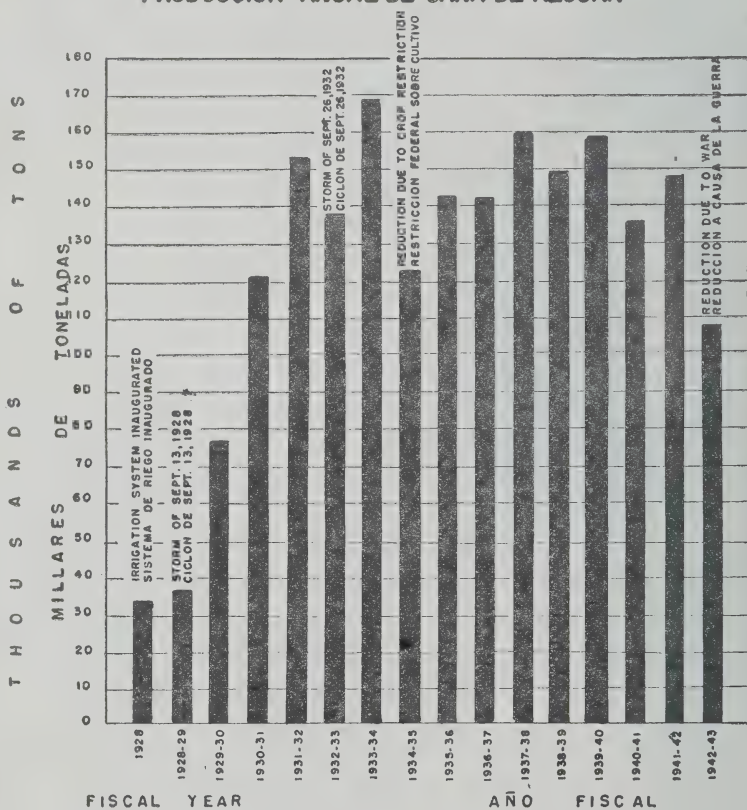
GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO

IRRIGATION SYSTEM

SISTEMA DE RIEGO

ANNUAL PRODUCTION OF SUGAR CANE

PRODUCCION ANUAL DE CAÑA DE AZUCAR



ANNUAL REPORT 1942 - 43

INFORME ANUAL 1942 - 43

DIAGRAM H.

DIAGRAMA H.

TABLES AND DIAGRAMS
OF THE
HYDROELECTRIC SYSTEM

TABLAS Y DIAGRAMAS
DEL
SISTEMA HIDROELECTRICO

HYDROELECTRIC SYSTEM
SISTEMA HIDROELÉCTRICO

TABLE No. 3
TABLA No. 3

MONTHLY FLUCTUATIONS OF POWER CONTRACTS
(GENERAL RATES)

FLUCTUACIONES MENSUALES EN LOS CONTRATOS
(TARIFAS GENERALES)

Month Mes	Hatillo		Camuy		Quebradillas		Isabela		Aguadilla		Moca		Aguada		Rincón		Añasco		Rural Zone Zona Rural		Totals Totales	
	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled
1942	16	15	19	17	23	8	37	38	154	169	6	13	23	16	5	8	19	26	92	92	394	402
	24	12	21	12	9	5	37	26	120	126	9	11	11	12	4	5	19	12	91	90	346	315
	17	20	23	17	10	5	31	26	148	145	8	4	35	21	6	5	16	10	86	71	380	324
	11	11	22	21	11	12	19	22	133	117	8	7	14	17	6	8	12	7	80	75	316	294
	8	16	9	9	18	5	26	55	141	131	6	7	10	14	12	11	11	17	65	68	306	333
	8	8	15	13	8	3	41	33	112	112	12	5	12	11	3	3	11	10	49	52	271	250
1943	14	7	8	6	8	6	17	13	112	118	9	7	12	4	8	3	20	17	66	50	274	231
	18	17	9	5	12	13	28	34	125	140	4	4	12	6	3	3	10	11	76	52	297	285
	15	8	6	5	9	10	18	16	117	108	11	3	13	14	6	6	14	8	69	49	278	227
	6	3	8	6	8	7	23	13	120	112	6	11	13	11	5	3	19	18	46	54	260	241
	8	8	12	8	12	8	24	15	113	107	8	2	17	13	3	6	18	20	56	40	271	227
	16	9	12	4	9	6	24	15	163	105	12	7	15	11	15	9	14	9	61	55	331	230
TOTALS	161	134	165	126	138	92	325	396	1,548	1,490	99	78	192	150	76	70	183	165	837	748	3,724	3,359
GAIN AUMENTO	27		39		46		19		58		21		42		6		18		89		365	

HYDROELECTRIC SYSTEM

*TABLE No. 4

MONTHLY FLUCTUATIONS OF POWER CONTRACTS
(FLAT RATE No. 3)

SISTEMA HIDROELECTRICO

TABLA No. 4

FLUCTUACIONES MENSUALES EN LOS CONTRATOS
(ALUMBRADO MINIMO SIN CONTADOR)

Mon th	Haillo		Canny		Quebradillas		Isabela		Aguadilla		Moca		Aguada		Rincón		Añasco		Totals Totals	
	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled	Issued	Cancelled
1942	Altas	Bajas	Altas	Bajas	Altas	Bajas	Altas	Bajas	Altas	Bajas	Altas	Bajas	Altas	Bajas	Altas	Bajas	Altas	Bajas	Altas	Bajas

1943

January.....
February.....
March.....
April.....
May.....
June.....
TOTALS.....
GAIN—AUMENTO.....

SISTEMA HIDROELECTRICO

HYDROELECTRIC SYSTEM

TABLE NO. 5

TABLE No. 5

CLASSIFICATION OF ENERGY DELIVERED
(KILOWATT-HOURS)

DISTRIBUCION DE LA ENERGIA ENTREGADA
(KILOVATIOS--HORA)

USE CLASSIFICATION											
Month	Domestic	Employees	Flat Rate Home Lighting	Commercial	Industrial	Primary Power	Public Lighting	Dependencies	Power Plant No. 3	Interconnection	Totals
CLASIFICACION DE CONSUMIDORES											
Mes	Residencial	Empleados	Alumbrado sin Contador	Comercial	Industrial	Fuerza Primaria	Alumbrado Publico	Dependencias	Planta No. 3	Interconexion	Total
1942	July	185,478	4,319	182	121,251	70,838	14,400	4,459	1,106	223,592	625,685
	August	203,225	4,632	63	125,305	69,605	14,200	4,983	27,764	203,650	753,427
	September	206,853	4,713	51	122,965	74,354	16,100	14,938	2,384	219,635	662,293
	October	211,094	5,400	90	123,749	59,440	19,400	23,456	1,494	180,854	624,937
	November	223,116	5,219	75	115,636	66,070	16,700	21,006	1,464	304,530	753,806
	December	223,313	5,790	64	112,253	64,053	16,700	22,127	1,506	302,843	748,629
1943	January	224,972	6,381	53	112,628	63,783	17,100	23,992	5,889	279,110	733,808
	February	228,558	6,473	34	107,214	77,893	5,700	23,266	8,045	285,960	744,043
	March	211,711	6,072	26	102,557	68,790	2,300	17,477	23,932	283,315	718,200
	April	228,865	6,086	26	107,664	88,361	1,300	13,343	4,700	297,750	752,996
	May	242,049	6,679	22	127,545	81,079	7,300	18,461	2,491	12,800	320,035
	June	214,269	6,891	11	120,392	85,767	21,700	19,306	4,671	17,300	101,760
Totals	2,603,603	68,665	697	1,398,949	873,224	153,100	209,014	86,483	34,800	2,903,034	8,331,569

HYDROELECTRIC SYSTEM

TABLE No. 6

CLASSIFICATION OF REVENUES

SISTEMA HIDROELECTRICO

TABLA No. 6

CLASIFICACION DE INGRESOS

Month		USE CLASSIFICATION							Total
Domestic	Employees	Flat Rate Home Lighting	Commercial	Industrial	Primary Power	Public Lighting	Interconnection	Power Plant No. 3	
CLASIFICACION DE CONSUMIDORES									
Mes	Residencial	Empleados	Alumbrado sin contador	Comercial	Industrial	Fuerza Primaria	Alumbrado Publico	Interconexión	Planta No. 3
1942	July.....	\$54.60	\$43.20	\$4,674.94	\$2,305.58	\$500.00	\$219.24	\$2,235.95	.....
	August.....	55.53	44.80	4,759.28	2,249.08	500.00	246.16	3,036.50	.....
	September.....	53.89	44.20	4,742.13	2,244.40	500.00	733.70	2,196.85	.....
	October.....	69.49	7.23	4,685.01	2,013.25	500.00	1,142.61	1,615.64	.....
	November.....	54.59	6.00	4,505.60	2,089.77	500.00	1,020.31	3,104.20	.....
	December.....	55.84	5.10	4,333.60	2,101.77	500.00	1,081.96	2,648.18	.....
1943	January.....	73.82	4.20	4,364.29	2,134.92	500.00	1,171.18	2,384.38	.....
	February.....	73.53	2.70	4,262.16	2,397.32	500.00	1,145.08	2,866.60	.....
	March.....	66.91	2.10	4,069.00	2,199.68	500.00	862.05	2,928.95	.....
	April.....	63.53	2.10	4,247.56	2,604.67	500.00	761.45	3,115.16	.....
	May.....	64.75	1.80	4,674.80	2,573.88	500.00	909.67	1,279.60	.....
	June.....	64.55	.90	4,626.06	2,612.23	801.50	952.80	1,248.33	.....
Totals.....	\$131,366.43	\$741.91	\$101.30	\$54,012.16	\$27,547.15	\$6,301.50	\$10,246.27	\$28,659.84	\$348.00
\$259,324.56									

HYDROELECTRIC SYSTEM

TABLE No. 7

AVERAGE RESIDENTIAL RATE CONSUMER
IN THE ISABELA OPERATING DISTRICT

SISTEMA HIDROELECTRICO

TABLA No. 7

CONSUMIDOR TIPO CON TARIFA RESIDENCIAL
EN EL DISTRITO HIDROELECTRICO DE ISABELA

Month Mes	Energy Delivered (Kw. hrs.)		Number of Consumers		Average Consumption (Kw. hrs.)		Monthly Revenues		Average Monthly Bill	
	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43
July.....	168,466	185,478	5,730	6,970	29.40	26.61	\$8,858.57	\$10,021.91	\$1.54	\$1.44
August.....	182,298	203,225	5,865	6,980	31.08	29.12	9,412.47	10,469.90	1.60	1.50
September.....	186,838	206,933	5,993	7,055	31.34	29.33	9,717.71	10,679.64	1.62	1.51
October.....	195,294	211,094	6,126	7,078	31.87	29.82	10,192.89	10,807.97	1.66	1.53
November.....	204,001	223,116	6,233	7,052	32.74	31.64	10,565.36	11,118.76	1.69	1.58
December.....	195,875	223,313	6,293	7,071	31.12	31.53	10,321.85	11,204.37	1.64	1.58
January.....	215,620	224,972	6,426	7,127	33.56	31.57	11,070.81	11,560.90	1.72	1.62
February.....	204,621	228,558	6,490	7,127	31.52	32.07	10,546.41	11,285.81	1.62	1.58
March.....	186,824	211,711	6,599	7,138	28.31	29.79	9,952.35	10,584.29	1.53	1.48
April.....	198,105	228,865	6,705	7,172	29.54	31.91	10,543.96	11,097.94	1.58	1.55
May.....	195,732	242,049	6,834	7,197	28.64	33.63	10,426.27	11,578.37	1.53	1.61
June.....	202,501	214,269	6,885	7,226	29.41	29.65	10,614.52	10,946.37	1.54	1.51
Totals.....	2,336,145	2,603,603	76,179	85,193	30.66	30.56	\$122,228.17	\$131,366.43	\$1.60	\$1.54

HYDROELECTRIC SYSTEM

TABLE NO. 8

AVERAGE COMMERCIAL RATE CONSUMER
IN THE ISABELA OPERATING DISTRICT

SISTEMA HIDROELECTRICO

TABLA NO. 8

CONSUMIDOR TIPICO CON TARIFA COMERCIAL
EN EL DISTRITO HIDROELECTRICO DE ISABELA

Month	Energy Delivered (Kw. hrs.)		Number of Consumers		Average Consumption (Kw. hrs.)		Monthly Revenues		Average Monthly Bill	
Mes	Energía Entregada (Kv. hrs.)		Número de Consumidores		Promedio de Consumo (Kv. hrs.)		Ingresos Mensuales		Promedio de Ingreso Mensual Por Factura	
	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43	1941-42	1942-43
July.....	98,637	121,251	1,132	1,253	87.13	96.77	\$4,072.30	\$4,674.94	\$3.59	\$3.73
August.....	109,649	125,305	1,144	1,213	95.84	103.30	4,358.16	4,739.38	3.80	3.91
September.....	127,461	122,965	1,174	1,262	108.56	97.44	4,788.90	4,742.13	4.08	3.76
October.....	131,669	123,749	1,239	1,243	107.15	99.56	4,973.66	4,632.04	4.01	3.77
November.....	144,636	115,636	1,256	1,238	115.15	89.09	5,419.69	4,595.60	4.31	3.54
December.....	130,455	112,233	1,199	1,202	108.81	93.37	4,917.74	4,333.60	4.10	3.61
January.....	126,341	112,528	1,214	1,218	104.16	92.39	4,802.28	4,364.29	3.94	3.58
February.....	128,474	107,214	1,229	1,225	104.61	87.52	4,844.93	4,262.16	3.94	3.48
March.....	120,904	102,537	1,214	1,212	99.67	84.62	4,637.59	4,069.00	3.82	3.36
April.....	130,624	107,664	1,232	1,215	106.91	88.61	4,972.04	4,237.56	4.04	3.50
May.....	127,899	127,545	1,233	1,237	104.54	103.11	4,893.18	4,674.80	3.97	3.78
June.....	136,587	120,302	1,282	1,233	106.54	93.04	5,155.12	4,626.66	4.02	3.58
Totals.....	1,513,366	1,398,949	14,548	14,877	104.02	94.07	\$57,840.59	\$54,012.16	\$3.97	\$3.63

HYDROELECTRIC SYSTEM

TABLE No. 9

AVERAGE FLAT RATE HOME LIGHTING CONSUMER IN THE ISABELA
OPERATING DISTRICT

(TARIFF No. 3)

SISTEMA HIDROELECTRICO

TABLA No. 9

CONSUMIDOR TIPICO CON ALUMBRADO MINIMO SIN CONTADOR EN EL
DISTRITO HIDROELECTRICO DE ISABELA

(TARIFA No. 3)

Month	Bills Issued	Consumption		Revenues	
		Block	Average	Block	Average
Mes	Facturas Expedidas	Consumo		Producido	
		Total	Promedio	Total	Promedio
1942		Kilowatt Hours Kilovatios-Hora			
July.....	139	182	1.32	\$43.20	\$0.315
August.....	48	63	1.31	14.80	.307
September.....	36	51	1.42	11.20	.311
October.....	24	90	3.75	7.20	.300
November.....	20	75	3.75	6.00	.300
December.....	17	64	3.78	5.10	.300
1943					
January.....	14	53	3.78	4.20	.300
February.....	9	34	3.78	2.70	.300
March.....	7	26	3.71	2.10	.300
April.....	7	26	3.71	2.10	.300
May.....	6	22	3.50	1.80	.300
June.....	3	11	3.67	.90	.300
Totals.....	330	697	2.11	\$101.30	\$0.307

HYDROELECTRIC SYSTEM

TABLE No. 10

AVERAGE POWER RATE CONSUMER IN THE ISABELA OPERATING DISTRICT
(TARIFF No. 5)
(SMALL AND MEDIUM SIZE INSTALLATIONS)

SISTEMA HIDROELECTRICO

TABLA No. 10

CONSUMIDOR TIPICO CON SERVICIO DE FUERZA EN EL DISTRITO
HIDROELECTRICO DE ISABELA
(TARIFA No. 5)

(INSTALACIONES CON CAPACIDAD HASTA 100 C. DE F.)

Month	H. P.	Consumption		Revenues	
		Block	Average	Block	Average
Mes	C. de F.	Consumo		Producido	
		Total	Promedio	Total	Promedio
1942		K lowatt-Hours Kilovattios-Hora			
July.....	1,056	67,953	64.35	\$2,156.20	\$2.04
August.....	1,017	66,935	65.82	2,105.05	2.07
September.....	920	71,484	77.70	2,111.73	2.30
October.....	927	56,904	60.31	1,880.23	2.03
November.....	922	63,419	68.78	1,954.28	2.12
December.....	848	61,380	72.38	1,959.69	2.31
1943					
January.....	873	61,230	70.14	1,995.60	2.29
February.....	837	73,367	87.65	2,204.97	2.63
March.....	863	64,154	74.34	2,002.33	2.32
April.....	932	83,138	89.20	2,395.06	2.57
May.....	948	79,040	83.38	2,368.83	2.50
June.....	949	81,092	85.45	2,408.52	2.54
Totals.....	11,092	830,096	74.84	\$25,542.49	\$2.31

HYDROELECTRIC SYSTEM

TABLE No. 11

AVERAGE EXCLUSIVE TRANSFORMER RATE CONSUMER IN THE ISABELA
OPERATING DISTRICT

(TARIFF No. 4)

SISTEMA HIDROELECTRICO

TABLA No. 11

CONSUMIDOR TIPICO CON TRANSFORMADOR EXCLUSIVO EN EL DISTRITO
HIDROELECTRICO DE ISABELA

(TARIFA No. 4)

Month	KV-A	Consumption		Revenues	
		Block	Average	Block	Average
Mes	KV-A	Consumo		Producido	
		Total	Promedio	Total	Promedio
1942		Kilowatt-Hours Kilovatios-Hora			
July.....	24	2,885	120.21	\$149.32	\$6.22
August.....	24	2,670	111.25	144.63	6.03
September.....	24	3,070	127.92	152.67	6.36
October.....	24	2,536	105.67	133.02	5.54
November.....	24	2,651	110.46	135.49	5.65
December.....	24	2,673	111.38	142.08	5.92
1943					
January.....	24	2,553	106.38	139.32	5.81
February.....	24	4,526	188.58	192.35	8.01
March.....	24	4,636	193.17	197.35	8.22
April.....	24	5,223	217.63	209.61	8.73
May.....	24	5,030	209.58	205.05	8.54
June.....	20	4,675	161.21	203.71	7.02
Totals.....	293	43,128	147.19	\$2,004.60	\$6.84

HYDROELECTRIC SYSTEM

TABLE No. 12

AVERAGE CONSUMER FOR ALL RATES IN THE ISABELA OPERATING DISTRICT
SISTEMA HIDROELECTRICO

TABLA No. 12

CONSUMIDOR TIPICO BAJO TODAS LAS TARIFAS EN EL DISTRITO
HIDROELECTRICO DE ISABELA

Tariff No.	Bills Issued	Block		Average	
		Consumption	Revenues	Consumption	Revenues
Tarifa No.	No. de Facturas	Total		Promedio	
		Consumo	Producido	Consumo	Producido
		Kw.-Hrs.		Kw. Hrs.	
1—Residential—Residencial.....	85,193	2,603,603	\$131,366.43	30.56	\$1.54
2—Commercial—Comercial.....	14,548	1,398,949	54,012.16	94.07	3.63
3—Flat Rate Home Lighting Alumbrado Mínimo sin Contador...	330	697	101.30	2.11	0.307
4—Exclusive Transformer Servicio por Transformador Exclu- sivo.....	73	43,128	2,004.66	591	27.46
5—Power (Small and medium size Installations) Fuerza (Instalaciones de pequeña Capacidad).....	1,210	830,096	25,542.49	686	21.11
6—Public Lighting Alumbrado Público.....	126	209,014	10,246.27	1,580	81.32
7—Power (Primary) Fuerza (Primaria).....	14	153,100	6,301.50	10,935	450.10
Special (Employee) Especial (Empleados).....	641	68,665	741.91	107	11.56
Interconnection—Interconexion.....	12	2,903,034	28,659.84	241,945	2,388.03
Special—Plant No. 3 Especial—Planta No. 3.....	3	34,800	348.00	11,600	116.00
Dependencies—Dependencias.....		86,483			
Totals—Totales.....	102,170	8,331,569	259,324.56	81.54	\$2.53

HYDROELECTRIC SYSTEM

TABLE NO. 13

USERS CLASSIFICATION

TARIFA No. 1
(RESIDENTIAL RATE)

SISTEMA HIDROELECTRICO

TABLA No. 13

CLASIFICACION DE CONSUMIDORES

TARIFA No. 1
(RESIDENCIAL)

Zone Zona	CLASSIFICATION—CLASIFICACION										Totals Totales
	0-10 Kw. Hrs.	11-20 Kw. Hrs.	21-30 Kw. Hrs.	31-40 Kw. Hrs.	41-50 Kw. Hrs.	51-70 Kw. Hrs.	71-100 Kw. Hrs.	101-150 Kw. Hrs.	151-200 Kw. Hrs.	Over (más de) 201	
Hatillo.....	111 43.70%	88 34.65%	18 7.09%	11 4.33%	2 .79%	11 4.33%	6 2.36%	1 .39%	.....	6 2.36%	254 100.00%
Camuy.....	163 47.66%	103 30.12%	29 8.49%	22 6.43%	4 1.17%	8 2.34%	4 1.17%	1 .29%	2 .58%	6 1.75%	342 100.00%
Quebradillas.....	105 33.98%	115 37.22%	31 10.03%	8 2.59%	10 3.24%	15 4.85%	15 3.24%	4 1.29%	3 .97%	8 2.59%	309 100.00%
Isabela.....	244 38.61%	212 33.54%	59 9.34%	18 2.85%	14 2.22%	32 5.06%	12 1.90%	15 2.37%	3 .47%	23 3.64%	632 100.00%
Aguadilla.....	830 34.10%	861 35.37%	277 11.38%	89 3.60%	56 2.30%	89 3.66%	69 2.84%	29 1.19%	21 .86%	113 4.64%	2,434 100.00%
Moca.....	102 54.84%	55 29.37%	8 4.30%	2 1.08%	4 2.15%	7 3.76%	5 2.69%	2 1.07%	.....	1 .54%	186 100.00%
Aguada.....	180 44.08%	131 36.12%	27 7.44%	9 2.48%	7 1.93%	11 3.03%	11 3.03%	2 .59%	.....	5 1.39%	363 100.00%
Rincón.....	58 36.94%	53 33.76%	16 10.19%	7 4.46%	7 4.46%	12 7.64%	3 1.91%	1 .64%	.....	.....	157 100.00%
Añasco.....	196 42.06%	165 35.41%	31 6.65%	18 3.86%	12 2.58%	23 4.94%	10 2.15%	6 1.28%	4 .86%	1 .21%	466 100.00%
Rural Zone.....	893 42.30%	755 36.79%	169 8.21%	104 5.07%	37 1.80%	45 2.19%	30 1.46%	13 .63%	6 .29%	25 1.23%	2,052 100.00%
TOTALS.....	2,837 39.43%	2,538 35.27%	663 9.24%	288 4.00%	153 2.13%	253 3.52%	160 2.22%	74 1.03%	39 .55%	188 2.61%	7,195 100.00%

NOTE.—This classification has been worked out from abstract of bills for the month of May, 1943.

NOTA.—Esta clasificación fué preparada con números del resumen de facturas para el mes de mayo, 1943.

HYDROELECTRIC SYSTEM

TABLE No. 14

USERS CLASSIFICATION

TARIFF No. 2

(COMMERCIAL RATE)

SISTEMA HIDROELECTRICO

TABLA No. 14

CLASIFICACION DE CONSUMIDORES

TARIFA No. 2

(COMERCIAL)

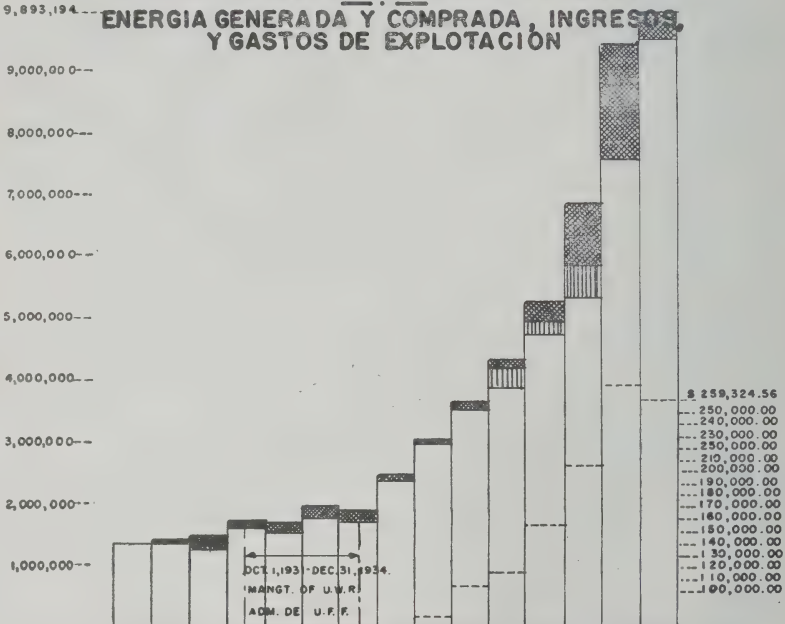
Zone Zona	CLASSIFICATION—CLASIFICACION										Totals Totales
	0—10 Kw. Hrs.	11—20 Kw. Hrs.	21—30 Kw. Hrs.	31—40 Kw. Hrs.	41—50 Kw. Hrs.	51—70 Kw. Hrs.	71—100 Kw. Hrs.	101—150 Kw. Hr.	151—200 Kw. Hrs.	Over (más de) 200	
Hatillo.....	16 40.00%	8 20.00%	2 5.00%	2 2.50%	1 2.50%	3 7.50%	2 5.00%	3 7.50%	2 5.00%	2 5.00%	40 100.00%
Camuy.....	17 37.78%	10 22.22%	3 6.67%	1 2.22%	1 2.22%	2 4.44%	3 6.67%	3 6.67%	.....	5 11.11%	45 100.00%
Quebradillas.....	22 29.73%	14 18.92%	6 8.12%	2 2.70%	2 2.70%	4 5.41%	11 14.86%	2 2.70%	.....	11 14.86%	74 100.00%
Isabeala.....	42 36.20%	23 19.83%	7 6.03%	4 3.45%	3 2.59%	3 2.50%	13 11.21%	7 6.03%	3 2.59%	11 9.48%	116 100.00%
Aguadilla.....	107 28.61%	57 15.24%	23 6.15%	17 4.55%	16 4.28%	27 7.22%	21 5.61%	22 5.88%	13 3.48%	71 18.98%	374 100.00%
Moca.....	4 16.00%	3 12.00%	2 8.00%	1 4.00%	2 8.00%	6 24.00%	2 8.00%	1 4.00%	1 4.00%	3 12.00%	25 100.00%
Aguada.....	26 41.94%	7 11.29%	6 9.68%	2 3.23%	2 3.23%	3 4.84%	7 11.29%	3 4.84%	1 1.61%	5 8.05%	62 100.00%
Rincón.....	9 32.15%	6 21.42%	.....	1 3.57%	.....	1 3.57%	5 17.86%	1 3.57%	.....	5 17.86%	28 100.00%
Afasco.....	33 42.87%	12 15.58%	6 7.79%	4 5.19%	1 1.30%	2 2.60%	5 6.49%	6 7.79%	3 3.90%	5 6.49%	77 100.00%
Rural Zone. Nona Rural	135 34.18%	64 16.33%	31 7.91%	19 4.85%	18 4.59%	49 12.75%	34 8.67%	26 6.63%	5 1.28%	11 2.81%	392 100.00%
TOTALS. Totales	411 33.34%	204 16.55%	86 6.97%	52 4.22%	46 3.73%	100 8.11%	103 8.35%	74 6.00%	28 2.27%	129 10.46%	1,233 100.00%

NOTE.—This classification has been worked out from abstract of bills for the month of May, 1943.
 NOTA.—Esta clasificación fué preparada con números del resumen de facturas para el mes de mayo, 1943.

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO
HYDRO-ELECTRIC SYSTEM

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO
SISTEMA HIDROELECTRICO

**POWER GENERATED AND PURCHASED, REVENUES,
OPERATION AND MAINTENANCE EXPENSES
ENERGIA GENERADA Y COMPRADA, INGRESOS,
Y GASTOS DE EXPLOTACION**



YEARS	ANNUAL PRODUCTION			REVENUES	OPER. & MAINT. EXPENSES
	GENERATED	PURCHASED	TOTALS		
1928-29	1,222,590	---	1,222,590	\$ 38,426.40	\$ 19,769.10
1929-30	1,359,070	22,300	1,381,370	45,517.23	21,774.62
1930-31	1,332,290	58,100	1,410,570	46,662.79	19,415.24
1931-32	1,638,570	26,342	1,664,912	52,582.35	18,965.39
1932-33	1,567,600	74,900	1,642,500	55,807.35	31,508.71
1933-34	1,758,300	121,850	1,880,150	57,788.11	20,269.37
1934-35	1,691,900	149,900	1,841,800	63,579.03	19,331.80
1935-36	2,335,500	53,750	2,389,250	80,751.68	22,386.05
1936-37	2,926,960	43,500	2,970,460	107,325.12	39,094.45
1937-38	3,197,340	74,950	3,272,290	117,166.27	51,587.98
1938-39	3,779,600	83,438	3,863,038	134,650.12	48,856.37
1939-40	4,930,630	149,872	5,180,302	155,038.04	51,255.06
1940-41	5,306,240	344,600	5,650,840	206,482.46	67,590.32
1941-42	7,749,920	1,827,753	9,577,673	269,276.08	78,150.10
1942-43	9,692,720	200,474	9,893,194	\$259,324.56	\$ 61,316.71

ANNUAL REPORT 1942-43
DIAGRAM NO. 1

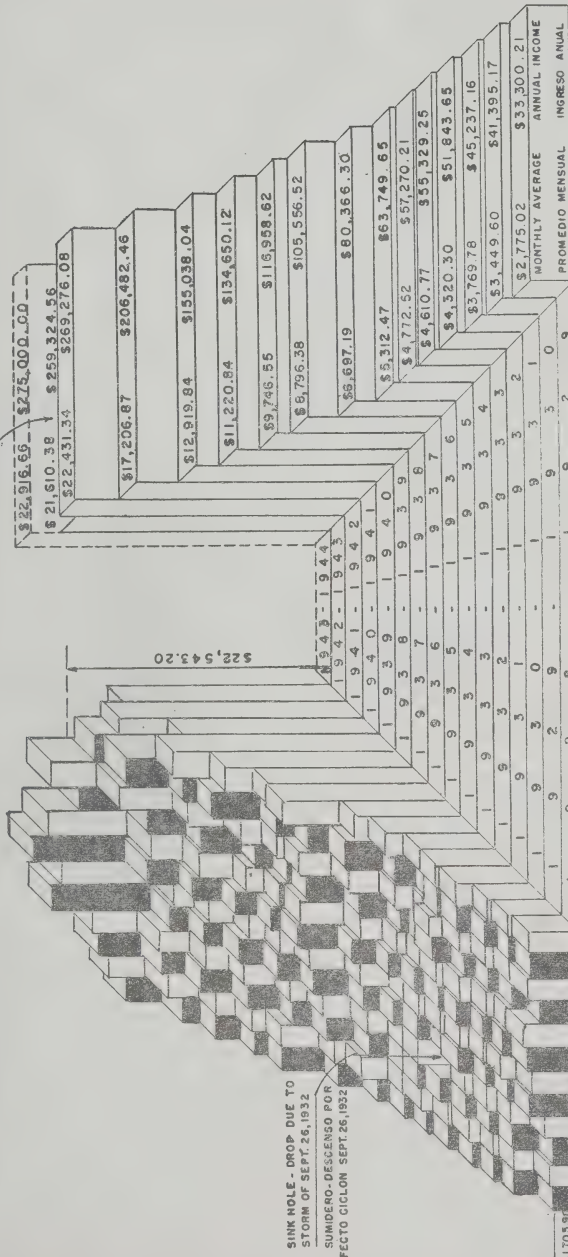
INFORME ANUAL 1942-43
DIAGRAMA NUM. 1

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO
HYDRO-ELECTRIC SYSTEM

GOBIERNO DE PUERTO RICO
• DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUESADILLAS, PUERTO RICO
SISTEMA HIDROELECTRICO

REDUCTION DUE TO WAR
REDUCCION A CAUSA DE LA GUERRA

SINK HOLE - DROP DUE TO
STORM OF SEPT. 26, 1932



— MOUNTAIN GRAPH —
SALES OF ELECTRIC ENERGY

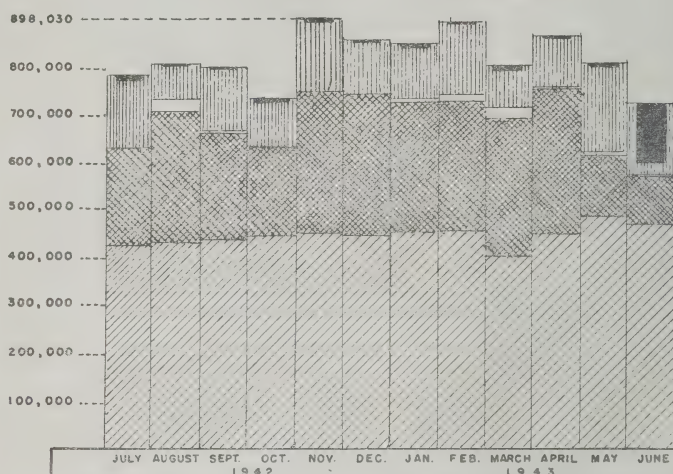
INFORME ANUAL 1942-43
DIAGRAMA NUM. 2

\$2,775.02	\$33,300.21
MONTHLY AVERAGE	ANNUAL INCOME
PROMEDIO MENSUAL	INGRESO ANUAL

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO
HYDRO-ELECTRIC SYSTEM

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO
SISTEMA HIDROELECTRICO

**DISTRIBUTION OF POWER
GENERATED AND PURCHASED
DISTRIBUCIÓN DE ENERGIA
GENERADA E IMPORTADA**



	1942				1943			
	LOSSES PERDIDAS	PUMPING STATIONS ESTACIONES DE BOMBEO	SOLD (INTERCONNECTION) EXPORTADA (INTERCONEXION)		DELIVERED TO CUSTOMERS ENTREGADA A CONSUMIDORES	PURCHASED FROM U. W. R. COMPRADA A U. F. F.	PURCHASED FROM CENTRAL COLOSO COMPRADA A CENTRAL COLOSO	
MONTH MES	GENERATED Y COMPRADA INTERCONEXION	PURCHASED COMPRADA INTERCONEXION	GENERATED GENERADA	LOSSES PERDIDAS	DELIVERED ENTREGADA	SOLD EXPORTADA		
JULY	750,530	21,360	769,170	160,578	—	400,927	223,592	
AUG.	828,650	1,310	827,340	74,462	26,540	422,013	303,650	
SEPT.	803,970	2,840	801,130	139,288	1,160	440,274	219,635	
OCT.	734,800	5,450	729,350	106,869	—	442,629	180,854	
NOV.	898,030	3,040	894,990	141,808	—	447,822	304,530	
DEC.	863,090	6,070	857,020	111,165	—	444,280	302,843	
JAN.	854,270	13,050	841,220	117,393	4,210	448,809	279,110	
FEB.	894,230	1,990	892,240	147,031	7,420	449,138	285,960	
MARCH	805,070	12,300	792,770	84,998	24,354	408,933	283,315	
APRIL	864,280	1,310	862,980	106,748	736	448,055	297,750	
MAY	820,080	6,970	813,110	193,175	2,860	486,126	120,035	
JUNE	736,184	124,784	611,400	144,254	862	468,246	101,760	
TOTALS	9,893,194	200,474	9,692,720	1,527,759	68,142	5,307,252	2,903,034	
ANNUAL REPORT 1942-43				INFORME ANUAL 1942-43				
DIAGRAM NO. 3				DIAGRAMA NUM. 3				

*SOLD TO "POINT BORINQUEN"

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO

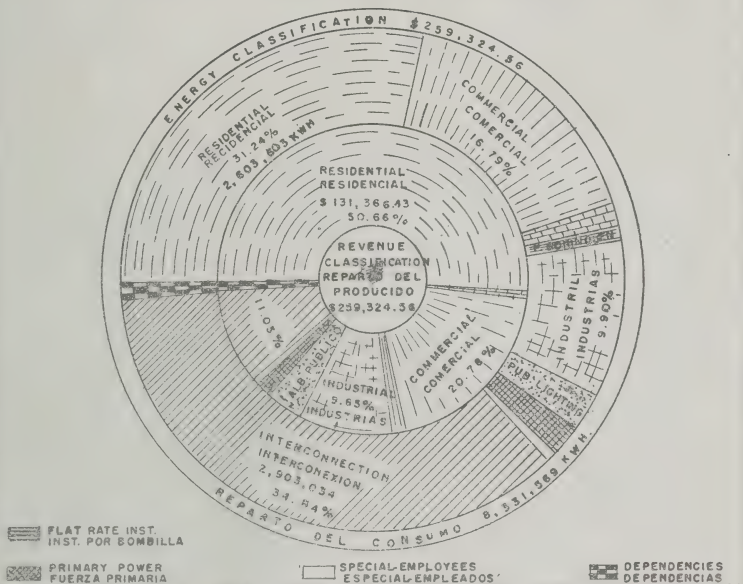
GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO

HYDRO-ELECTRIC SYSTEM

SISTEMA HIDROELECTRICO

USE CLASSIFICATION FOR ENERGY DELIVERED AND REVENUES

REPARTO DEL CONSUMO DE ENERGIA Y PRODUCIDO SEGUN LA CLASE DE USUARIO



RATES TARIFAS	1941 — 1942		1942 — 1943		DIFFERENCE DIFERENCIA	
	KW.-HRS.	AMOUNT IMPORTE	KW.-HRS.	AMOUNT IMPORTE	KW.-HRS.	AMOUNT IMPORTE
RESIDENCIAL RESIDENCIAS	2,336,145	\$ 122,228.17	2,603,603	\$ 131,366.43	267,458	\$ 9,138.26
COMERCIAL COMERCIAL	1,513,336	\$ 57,840.59	1,398,049	\$ 54,012.18	- 114,387	- 3,828.43
FLAT RATE INST. INST. POR BOMBILLA	40,104	\$ 3,364.80	697	\$ 101.30	- 39,407	- 3,263.50
EXCL. TRANS. SERVICE SERV. DE TRANS. EXCL.	1,212,829	\$ 19,320.29	43,128	\$ 2,004.66	- 1,169,701	- 17,315.63
INDUSTRIAL INDUSTRIAS	1,003,692	\$ 29,568.21	930,096	\$ 25,542.49	- 173,596	- 4,025.72
STREET LIGHTING ALUMBRADO PUBLICO	275,976	\$ 13,531.19	209,014	\$ 10,246.27	- 66,862	- 3,284.92
PRIMARY POWER FUERZA PRIMARIA	154,200	\$ 6,000.00	153,100	\$ 6,301.50	- 1,100	\$ 301.50
SPECIAL EMPLOYEES ESPECIAL EMPLEADOS	49,323	\$ 587.60	68,665	\$ 741.91	19,342	\$ 154.31
INTERCONNECTION EXPORTADA	1,659,130	\$ 16,833.23	2,903,034	\$ 28,659.84	1,243,904	\$ 11,824.61
DEPENDENCIES DEPENDENCIAS	169,494	—	121,283	\$ 348.00	- 48,211	\$ 348.00
TOTALS	8,414,129	\$ 269,276.08	8,331,569	\$ 259,324.56	- 82,560	\$ - 9,951.52

ANNUAL REPORT 1942-43
DIAGRAM No. 4

INFORME ANUAL 1942-43
DIAGRAMA NUM. 4

POINT BORINQUEN - PUNTA BORINQUEN

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO

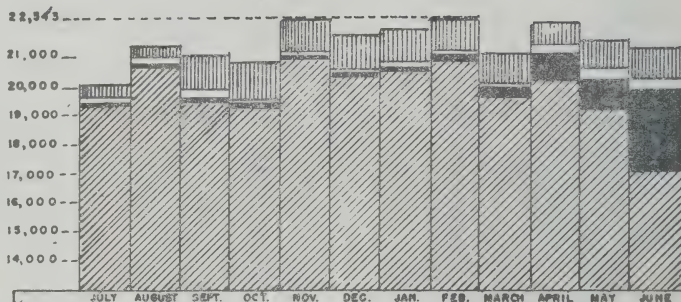
GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO




HYDRO-ELECTRIC SYSTEM

SISTEMA HIDROELECTRICO

**MONTHLY TOTALS OF BILLS ISSUED, COLLECTED
AND OUTSTANDING AT END OF COLLECTION PERIOD**
**MONTANTES MENSUALES DE LAS FACTURAS
RENDIDAS Y SITUACION DE LOS COBROS AL CERRAR
EL ULTIMO PLAZO PARA EL PAGO DE LAS CUENTAS**

DOLLARS
DOLARES



JULY AUGUST SEP. OCT. NOV. DEC. JAN. FEB. MARCH APRIL MAY JUNE				1942				1943			
 CREDITS TO MUNICIPALITIES CREDITOS A MUNICIPIOS				OUTSTANDING MUNICIPALITIES, INSULAR GOVERNMENT AND BUSINESS FIRMS PENDIENTE DE COBRO A MUNICIPIOS GOBIERNO INSULAR Y FIRMAS COMERCIALES				 COLLECTED COBRADA			
 PENDIENTE DE COBRO A RESIDENCIAS Y COMERCIOS											
MONTH MES	TOTAL BILLED TOTAL FACTURADO	LESS CREDITS TO MUNICIPALITIES MENOS CREDITOS A MUNICIPIOS	NET BILLED FOR COLLECTION NETO FACTURADO PARA EL COBRO	COLLECTED COBRADO	PENDING PENDIENTE DE	COLLECTION COBRO	TOTAL				
JULY	20,055.42	282.08	19,773.34	19,443.55	63.05	266.74	329.79				
AUGUST	21,311.92	307.93	21,003.99	20,682.41	66.01	275.57	341.58				
SEPT.	21,181.22	805.67	20,375.55	19,925.50	65.56	384.49	480.05				
OCT.	20,929.20	1,213.39	19,715.81	19,363.36	71.00	181.43	282.43				
NOV.	22,682.23	1,080.41	21,601.82	21,282.52	72.16	58.14	126.30				
DEC.	21,930.82	1,147.48	20,783.34	20,539.70	71.79	171.85	243.64				
JAN.	22,193.69	1,233.23	20,960.46	20,726.04	63.12	172.30	232.42				
FEB.	22,543.20	1,220.17	21,323.03	20,913.77	260.19	149.07	409.26				
MARCH	21,212.96	935.34	20,277.64	19,702.94	414.14	160.56	574.70				
APRIL	22,439.41	829.96	21,609.45	20,261.75	1,149.94	197.78	1,347.72				
MAY	21,711.07	955.72	20,755.35	19,030.70	1,261.42	403.23	1,664.65				
JUNE	21,426.40	1,023.17	20,403.23	16,234.57	3,763.16	405.50	4,168.66				
TOTAL	208,324.56	11,074.38	197,250.18	173,104.79	7,321.54	2,922.68	10,141.22				

+ THIS AMOUNT REPRESENTS 1.09% OF THE TOTAL AMOUNT BILLED, A LARGE PORTION OF IT IS UNRECOVERABLE DUE TO THE DISTRICT OF SMALL BILLS, INCURRED BY CONSUMERS WHO MOVE OUT OF THE OPERATING DISTRICT, LOSE THEIR INCOME, ETC.

ESTA CANTIDAD REPRESENTA EL 1.09% DEL TOTAL FACTURADO. GRAN PARTE DE ELLO ES INCORRIBLE DUE A LA CANTIDAD DE BILLETES PEQUEÑOS, INCURRIDOS POR LOS CONSUMIDORES QUE DEJAN DE SATISFACER DESIDO A MUJANZAS FUERA DEL DISTRITO, A QUE PERDAN SUS INGRESOS, ETC.

³ THIS AMOUNT REPRESENTS 1.09% OF THE TOTAL AMOUNT BILLED. A LARGE PROPORTION OF IT IS UNRECOVERABLE MADE UP OF NUMEROUS SMALL BILLS IGNORED BY CONSUMERS WHO MOVE OUT OF THE OPERATING DISTRICT, LOSE THEIR INCOME, ETC.

ESTA CANTIDAD REPRESENTA EL 1.09% DEL TOTAL FACTURADO. GRAN PARTE DE ELLA ES INCORABLE CONSTITUIDA COMO ESTA POR NUMEROSAS SUMAS PEQUEÑAS QUE LOS ABONADOS DEJAN DE SATISFACER DESIDO A MUÐANZAS FUERA DEL DISTRITO, A QUE PIERDEN SUS INGRESOS, ETC.

ANNUAL REPORT 1942-43
DIAGRAM NO. 8

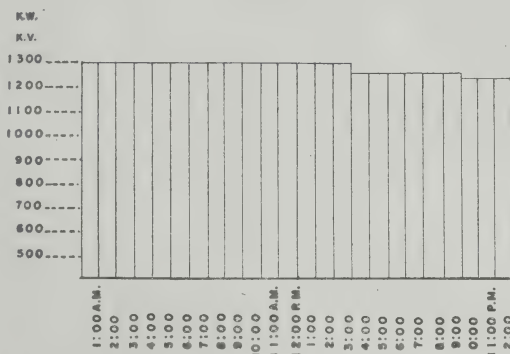
INFORME ANUAL 1942-43
DIAGRAMA NUM. 8

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO

HYDRO-ELECTRIC SYSTEM

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO

SISTEMA HIDROELECTRICO

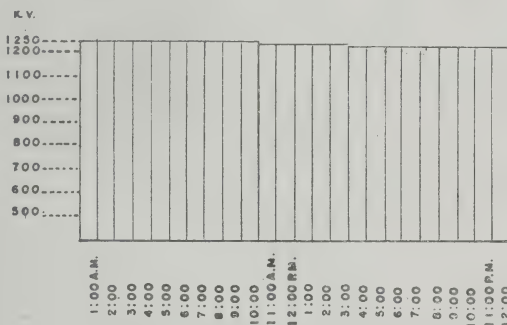


LOAD CURVE-DAY OF MAXIMUM PRODUCTION
(SYSTEM INTERCONNECTED)

CURVA DE LA CARGA EL DIA DE MAXIMA PRODUCCION
(SISTEMA INTERCONECTADO)

APRIL 17, 1943
ABRIL 17, 1943

OUTPUT 30370 K.W.H.
PRODUCCION 30370 K.V.H.



TYPICAL DAILY LOAD CURVE

CURVA DE LA CARGA TIPICA DIARIA

OUTPUT- 29,530 K.W.H.

PRODUCCION-29,530 K.V.H.

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO
HYDRO-ELECTRIC SYSTEM

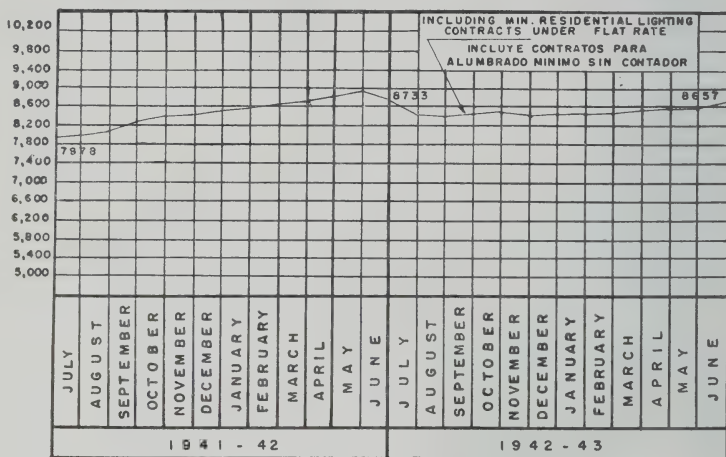
GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO
SISTEMA HIDROELECTRICO

TREND OF POWER CONTRACTS

INCLUDES CONTRACTS FOR TEMPORARY LIGHTING SERVICE

MOVIMIENTO DE CONTRATOS

INCLUYE CONTRATOS PARA SERVICIO DE ALUMBRADO PROVISIONAL



FISCAL YEAR 1941-42 AÑO FISCAL 1941-42				FISCAL YEAR 1942-43 AÑO FISCAL 1942-43			
MONTH MES	PREVIOUS PREVIO	INCREASE OR DECREASE AUMENTO O DESCENSO	ACTUAL ACTUAL	MONTH MES	PREVIOUS PREVIO	INCREASE OR DECREASE AUMENTO O DESCENSO	ACTUAL ACTUAL
JULY	7978	74	8052	JULY	8733	- 313	8420
AUGUST	8052	- 105	8157	AUGUST	8420	- 60	8360
SEPT.	8157	109	8266	SEPT.	8360	44	8404
OCT.	8266	126	8392	OCT.	8404	10	8414
NOV.	8392	12	8404	NOV.	8414	- 31	8383
DEC.	8404	79	8483	DEC.	8383	18	8401
JAN.	8483	48	8531	JAN.	8401	40	8441
FEB.	8531	104	8635	FEB.	8441	7	8448
MARCH	8635	122	8757	MARCH	8448	49	8497
APRIL	8757	92	8849	APRIL	8497	19	8516
MAY	8849	67	8916	MAY	8516	43	8559
JUNE	8916	- 183	8733	JUNE	8559	98	8657
TOTALS	7978	755	8733	TOTALS	8733	- 76	8657

ANNUAL REPORT 1942-43

INFORME ANUAL 1942-43

DIAGRAM NO 7

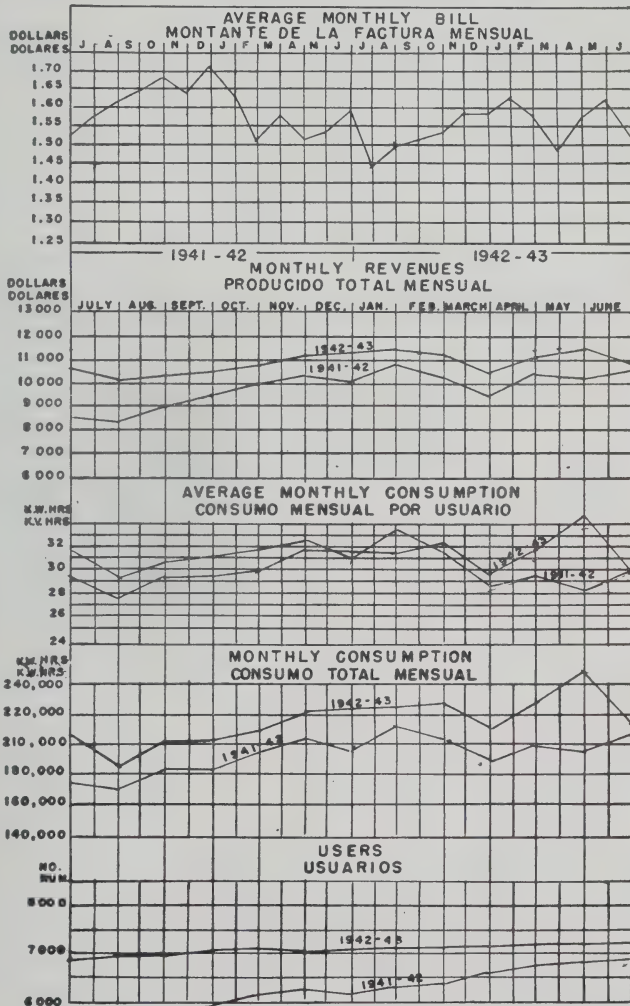
DIAGRAMA NUM 7

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO
HYDRO-ELECTRIC SYSTEM

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO
SISTEMA HIDROELECTRICO

AVERAGE RESIDENTIAL RATE CONSUMER IN THE ISABELA OPERATING DISTRICT

USUARIO TIPICO CON TARIFA RESIDENCIAL EN EL DISTRITO HIDROELECTRICO DE ISABELA



ANNUAL REPORT 1942-43

DIAGRAM NO. 8

INFORME ANUAL 1942-43

DIAGRAMA NUM 8

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF THE INTERIOR
ISABELA IRRIGATION SERVICE
QUEBRADILLAS, PUERTO RICO

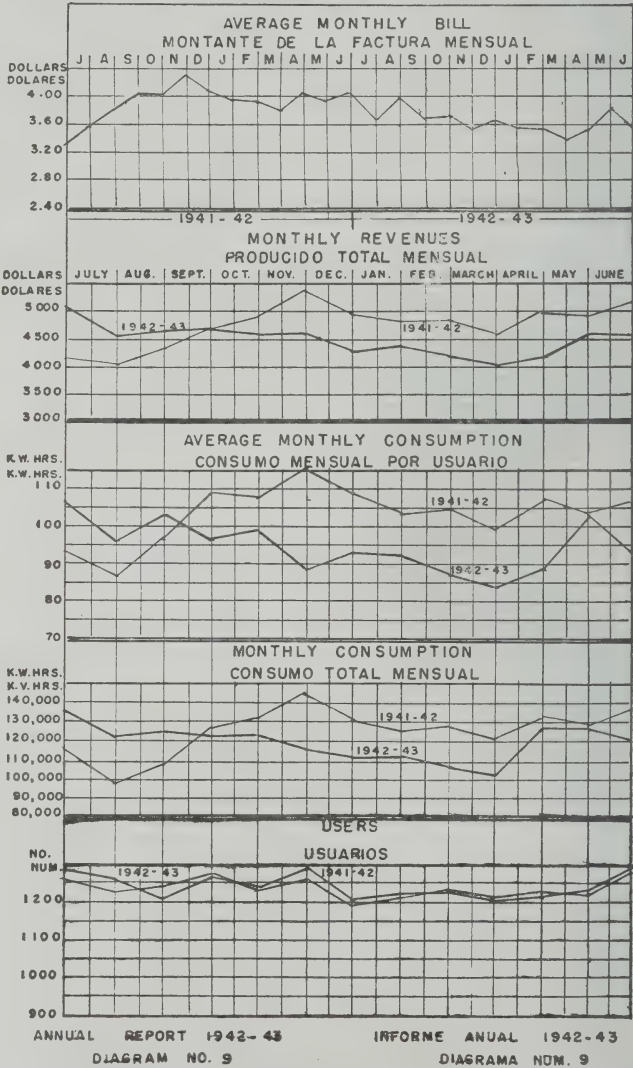
GOBIERNO DE PUERTO RICO
DEPARTAMENTO DEL INTERIOR
SERVICIO DEL RIEGO DE ISABELA
QUEBRADILLAS, PUERTO RICO

HYDRO-ELECTRIC SYSTEM

SISTEMA HIDROELECTRICO

AVERAGE COMMERCIAL RATE CONSUMER IN THE
ISABELA OPERATING DISTRICT

USUARIO TIPICO CON TARIFA COMERCIAL EN
EL DISTRITO HIDROELECTRICO DE ISABELA



TABLES AND EXHIBITS
OF THE
DIVISION OF PROPERTY AND ACCOUNTS

TABLAS Y ANEXOS
DE LA
DIVISION DE PROPIEDAD Y CUENTAS

DIVISION OF PROPERTY AND ACCOUNTS

TABLE "A"

CLASSIFICATION OF BILLS ISSUED

DIVISION DE PROPIEDAD Y CUENTAS

TABLA "A"

CLASIFICACION DE FACTURAS EXPEDIDAS

Month	No. of Bills	Electric Energy (Gross Value)	Irrigation Water (Law No. 178, approved 5/14/41)	Water for Domestic and Industrial Purposes	Equipment, Materials, and Supplies	Consumers' Contributions for Line Constructions, etc.	Rentals	Sundry	Total
Mes	Núm. de Facturas	Energía Eléctrica (Valor Total Facturado)	Agua para Riego (Ley No. 178, aprobada 5/14/41)	Agua para fines Domésticos e Industriales	Equipo, Materiales y Efectos	Aportado por Consumidores para Construcción de Líneas, etc.	Rentas	Varios	Total
1942									
July.....	8,573	\$20,055.42	\$38.70	\$1,164.42	\$108.00	\$50.00	\$225.09	\$63.74	\$21,706.37
August.....	8,445	21,311.92	12.50	1,163.39	282.00	50.00	10.00	268.89	23,088.70
September.....	8,552	21,181.22	15.50	1,170.66	236.70	108.00	10.00	46.91	22,788.99
October.....	8,539	20,829.20	1.50	1,164.81	145.29	10.00	10.00	454.54	22,615.34
November.....	8,567	22,489.23	5.40	1,158.44	6.62	265.00	10.00	96.59	24,031.28
December.....	8,483	21,930.82	.....	1,185.44	278.26	358.00	10.00	5,647.43	29,409.95
1943									
January.....	8,555	22,193.69	16.90	1,173.98	64.00	21.00	20.00	118.18	23,607.75
February.....	8,577	22,543.20	28.65	1,123.93	665.61	147.36	186.00	4,275.04	28,989.79
March.....	8,562	21,212.98	176.60	1,195.73	58.71	31.00	10.00	46.29	22,731.31
April.....	8,607	22,439.41	24.40	1,135.80	572.71	46.00	10.00	338.73	24,567.05
May.....	8,657	21,711.07	10.00	1,129.10	168.00	14.00	10.00	264.61	23,306.78
June.....	8,748	21,426.40	95.90	1,109.66	156.75	73.00	98.00	8,905.20	31,864.91
Less: Bills covering Previous Year's Accounts.....	102,865	\$259,324.56	\$426.05	\$13,875.36	\$2,742.65	\$1,173.36	\$610.09	\$20,526.15	\$298,678.22
Menos: Facturas cubriendo Cuentas del Año Anterior.....		67.49							67.49
Totals.....	102,865	\$259,257.07	\$426.05	\$13,875.36	\$2,742.65	\$1,173.36	\$610.09	\$20,526.15	\$298,610.73

DIVISION OF PROPERTY AND ACCOUNTS

TABLE "B"

DIVISION DE PROPIEDAD Y CUENTAS

TABLA "B"

CLASIFICACION DE COMPROBANTES DE PAGO PARA EL AÑO

FISCAL QUE TERMINO EN JUNIO 30, 1943

Month	Vouchers Issued	Salaries	Wages	Equipment, Materials, & Supplies	Transportation (All kinds)	Rents	Telephone and Telegraph	Sundry	Previous Years' Accounts	Amortization of Bonds & Loans, & Payment of Interest	Reimbursement of Customers' Cash Bond Deposits	Total
Mes	Comprobantes Expedidos	Sueldos	Jornales	Equipo, Materiales y Efectos	Transporte (Toda clase)	Alquileres y Arrendamientos	Teléfono y Telégrafo	Varios	Cuentas de Años Anteriores	Amortización de Bonos y Préstamos y Pago de Intereses	Reembolso de Fianzas de Consumidores	Total
1942												
July	30	\$5,976.61	\$3,432.13	\$2,317.92	.....	\$248.42	\$26.50	\$85.00	\$1,706.37	.....	.....	\$13,792.95
August	26	5,026.65	3,749.39	3,833.16	.....	379.43	26.50	1,776.68	16.98	.....	.....	15,725.58
September	34	5,026.74	3,365.69	2,320.90	\$47.70	339.43	64.69	64.53	.....	.....	.....	12,712.68
October	29	5,822.71	3,621.79	3,314.34	6.73	288.42	26.50	16,767.91	.....	.....	.....	32,251.30
November	29	5,822.73	4,372.79	2,366.83	555.81	390.43	80.33	130.00	.....	.....	.....	13,718.92
December	36	5,806.74	4,065.21	2,605.06	.....	.....	.....	250.37	.....	\$359,281.25	.....	371,998.63
1943												
January	31	5,800.95	6,482.64	1,768.00	276.63	578.14	26.50	630.77	.....	.....	315.00	15,878.63
February	26	5,806.65	4,964.22	3,811.53	282.03	322.85	32.44	515.50	.....	.....	116.00	20,851.22
March	27	5,806.11	4,537.25	17,496.18	439.78	456.33	86.67	1,788.85	.....	.....	170.00	28,819.47
April	42	5,694.28	4,380.29	3,982.91	709.93	288.42	104.75	139.90	4,656.23	.....	.....	19,905.61
May	49	5,872.82	6,422.33	1,065.95	266.02	390.44	15.96	506.95	.....	.....	298.00	14,868.46
June	55	5,433.40	7,856.09	3,416.21	289.61	390.44	47.13	906.25	.....	95,631.25	455.09	120,405.47
Totals	457	\$69,747.59	\$55,259.72	\$61,328.99	\$3,411.03	\$4,072.74	\$537.97	\$23,632.71	\$6,379.58	\$454,812.50	\$1,746.09	\$680,928.92

Plus: Vouchers in Transit as June 30, 1942.....

Plus: Comprobantes en Curso en Junio 30, 1942.....

Total, as of June 30, 1943.....

Total, Junio 30, 1943.....

\$2,467.67

\$683,396.59

NOTES

(1) Under "Sundry" the following items are included:

Purchase of Electric energy	\$983.97
Purchase of Land	721.50
Postage	558.40
Indemnity for Damages	217.00
INSURANCE:	
Hurricane and Fire Insurance for 5 years	\$13,060.00
Public Liability and Property Damages	686.44
Insurance of Employees and Laborers	1,985.72
Premium on Bonds of Employees	205.85
Auto Insurance	230.08
Reimbursements (Contra):	
Revenue Accounts	\$1,594.15
Cash in Transit	2,476.22
Miscellaneous	913.38
	<u>\$23,632.71</u>

(2) Under "Previous Years' Accounts" the following were paid:

Utilization of Water Resources	\$4,656.23
Puerto Rico Water Resources Authority	1,351.98
Sundry	371.37
	<u>\$6,379.58</u>

NOTAS

(1) Bajo "Varios" se incluyen las siguientes partidas:

Compra de Energía Eléctrica	\$983.97
Compra de Tierras	721.50
Franqueo	558.40
Indemnización por Daños	217.00
SEGUROS:	
Sobre Huracanes e Incendios	\$13,060.00
Responsabilidad Pública sobre Líneas Eléctricas	686.44
Seguro de Empleados y Obreros	1,985.72
Primas sobre Pólizas de Empleados	205.85
Seguros Automóviles	230.08
Reembolsos (Contra):	
Ingresos	\$1,594.15
Gastos	2,476.22
Misceláneos	913.38
	<u>\$23,632.71</u>

(2) Bajo "Cuentas de Años Anteriores" se pagaron las siguientes:

Utilización de las Fuentes Fluviales	\$4,656.23
Autoridad de las Fuentes Fluviales de P. R.	1,351.98
Varios Acreedores	371.37
	<u>\$6,379.58</u>

DIVISION OF PROPERTY AND ACCOUNTS
 TABLE "C"
 ANNUAL BUDGET
 COMPARISON OF ACTUAL AND AUTHORIZED EXPENDITURES

Items	Operation and Maintenance				Amortization of Debts and Payment of Interest	Improvements and Extensions			Purchase of Machinery and Equipment	Contingencies	Totals
	Irrigation System	Hydroelectric System	General Administration	Mejoras y Extensiones							
Partidas	Sistema de Riego	Sistema Hidroeléctrico	Administración General	General			Compra de Maquinaria y Equipo	Imprevistos	Totales		
Total Expenditures (Total de Gastos)	\$24,314.24	\$61,316.71	\$44,498.99	\$459,468.73	\$3,805.34	\$20,039.19	\$911.22	\$2,246.88		\$616,601.30	
Adjustments (Ajustes)	-7.10	-1,511.02	-862.29						2,380.41		
Authorized Expenditures as per Budget (Gastos Autorizados según Presupuesto)	\$24,307.14	\$59,805.69	\$43,636.70	\$459,468.73	\$5,805.34	\$20,039.19	\$911.22	\$2,246.88	\$2,380.41	\$616,601.30	
	27,070.00	58,292.00	41,770.00	459,812.50	4,000.00	20,000.00	1,200.00	3,750.00	19,125.52	635,020.02	
Actual Differences with Approved Budget (Diferencias efectivas con Presupuesto Aprobado)	\$2,762.86	-\$1,513.69	-\$1,866.70	\$343.77	\$194.66	-\$39.19	\$288.78	\$1,503.12	\$16,745.11	\$18,418.72	

NOTE: Item of \$2,380.41 under "Contingencies" cover:

- (a) Printing, traveling expenses, etc., incurred in connection with civil cases of this Service versus the United States of America (Borinquen Air Base).....\$748.80
 (b) Hurricane and Fire Insurance consumed during year of five-year active policy.....1,631.61
 \$2,380.41

NOTA: Partida de \$2,380.41 bajo "Imprevistos" cubre:

- (a) Impresión, gastos de viaje, etc., incurridos en conexión con casos civiles de este Servicio contra los Estados Unidos de América (Base Aérea de Borinquen).....\$748.80
 (b) Seguro contra huracán e incendio consumido durante el año de poliza por 5 años en vigor.....1,631.61
 \$2,380.41

DIVISION OF PROPERTY AND ACCOUNTS
 TABLE "D"
 DIVISION DE PROPIEDAD Y CUENTAS
 TABLA "D"
 INDICANDO CANTIDADES COBRADAS POR EL OFICIAL
 RECEPTOR DURANTE EL AÑO FISCAL 1942-43
 SHOWING AMOUNTS COLLECTED BY RECEIVING OFFICER
 DURING FISCAL YEAR 1942-43

Month Mes	Power Bills 1942-43				Power Bills (Previous Years)	Irrigation Water (Law No. 178 of 1941)	Water for Water- works, Domestic & Industrial Purposes	Sundry Revenues	Total Collections
	Total Billed Monthly	Credits to Municipal- ities	Net Billed for Collection	Total Collected During Year					
Facturas de Corriente Eléctrica 1942-43									
	Total Facturado Mensual- mente	Menos: Créditos a Municipi- pios	Neto Facturado para el Cobro	Total Cobrado durante el Año	Facturas de Corriente Eléctrica (Años Anteriores)	Agua para Riego (Ley No. 178 de 1941)	Agua para Acueductos y Fines Domésticos e Indus- triales	Ingresos Miscela- neos	Total Cobranzas
1942									
July.....	\$20,055.42	\$282.08	\$19,773.34	\$19,443.55	\$19,327.01	\$38.70	\$18.87	\$282.97	\$39,111.10
August.....	21,311.92	307.93	21,003.99	20,662.41	21,149.22	12.50	26.32	982.93	42,833.38
September.....	21,181.22	805.67	20,375.55	19,925.50	10,194.90	15.50	1,947.28	725.61	32,806.79
October.....	20,829.20	1,213.39	19,615.81	19,363.36	223.12	1.50	1,246.27	25.92	20,507.90
November.....	22,489.23	1,080.41	21,408.82	21,282.52	148.47	5.40	2,691.01	552.99	24,680.39
December.....	21,930.82	1,147.48	20,783.34	20,539.70	105.69	.....	1,804.76	631.43	23,081.58
1943									
January.....	22,193.69	1,233.23	20,960.46	20,728.04	26.85	16.90	16.56	405.50	21,193.85
February.....	22,543.20	1,220.17	21,323.03	20,913.77	359.63	28.65	3,323.84	301.66	24,927.55
March.....	21,212.98	935.34	20,277.64	19,702.94	12.97	176.00	875.43	92.30	20,860.24
April.....	22,439.41	829.96	21,609.45	20,261.73	122.97	24.40	28.05	70.75	20,307.90
May.....	21,711.07	995.72	20,715.35	19,050.70	17.17	10.00	1,735.02	249.88	21,062.27
June.....	21,426.40	1,023.17	20,403.23	16,234.57	39.91	95.90	1,474.74	422.68	18,267.80
	\$259,324.56	\$11,074.55	\$248,250.01	\$238,108.79	\$51,727.91	\$426.05	\$15,188.15	\$4,744.12	\$310,195.02
Less: Power Bills collected for 1942-43 in July, 1943.									
Menos: Facturas de corriente eléctrica cobradas para 1942-43, en julio, 1943									
				19,526.31	.....	.....	.....	.....	19,526.31
Total Collected by Receiving Officer during Fiscal Year 1942-43.									
Total Cobrado por el Oficial Receptor durante el Año Fiscal 1942-43									
				\$218,582.48	\$51,727.91	\$426.05	\$15,188.15	\$4,744.12	\$290,668.71

DIVISION OF PROPERTY AND ACCOUNTS

TABLE "E"

SHOWING ACCOUNTS COLLECTED FOR THE ISABELA IRRIGATION SERVICE BY INSULAR TREASURY DEPARTMENT DURING FISCAL YEAR 1942-43

DIVISION DE PROPIEDAD Y CUENTAS

TABLA "E"

INDICANDO CANTIDADES COBRADAS PARA EL SERVICIO DEL RIEGO DE ISABELA POR EL DEPARTAMENTO DE HACIENDA INSULAR DURANTE EL AÑO FISCAL 1942-43

Month	Collectors of Internal Revenues				Office of the Treasurer of Puerto Rico							
	Tax Levies		Surcharges	Adjustments, Act 146 of 1937	Totals	Reimbursements, etc.	Cash in Transit	1/10% Special Tax (Act 120 of 1939)	Insular Treasurer Transfer	Repayment by Special Disb. Officer	Power Bills	Totals
	Previous Years	Current Year										
Mes	Colectores de Rentas Internas				Oficina del Tesorero de Puerto Rico							
	Cuotas de Riego		Recargos	Ajustes Ley 146 de 1937	Totales	Reembolsos, etc.	Efectivo en Tránsito	Contribución Especial de 1/10% (Ley 120 de 1939)	Transfe-rencias del Tesoro Insular	Reembolso por el Oficial Pagador	Facturas Corriente Eléctrica	Totales
	Años Anteriores	Año Actual										
1942												
July	\$25 75	\$4,787 02	\$4 72	\$0 53	\$4 818 02		\$1,406 00					\$1,406 00
August	252 20	619 91	11 56		883 67		22 65					22 65
September	39 35	523 48	5 99	1,093 01	1,661 83		24 16					1 586 93
October	521 90	946 19	58 16		1,526 25	\$1,562 77	4 99	\$158,000 00	\$140,000 00			298,004 99
November	137 90	768 08	27 30		933 28							
December	2,036 26	18 10	26 74		2,081 10							
1943												
January	155 84	121 90	27 68		305 42	5,881 36	969 87					6,851 23
February	16 60	2,514 12	1 06		2,531 78		28 17					3 21
March	91 77	2,058 77	24 68		2,175 22	31 38						
April	276 20	902 29	34 65	124 99	1,338 13							4,438 87
May	43 70	316 59	15 24	922 47	1,298 00	4,438 87						254,032 00
June	133 80	2,187 42	87 16		2,408 38			240,000 00		\$14,000 00		\$32 00
Totals	\$3,731 27	\$15,763 87	\$324 94	\$2,141 00	\$21,961 08	\$11,914 38	\$2,399 50	\$398,000 00	\$140,000 00	\$14,000 00	\$32 00	\$566,345 88

SUMMARY

Amount collected by Receiving Officer (Table "D")..... \$290,668.71
 Collected by Collectors of Internal Revenues..... 21,961.08
 Collected by Office of the Treasurer of P. R. 566,345.88
 Cash Receipts..... \$878,975.67

RESUMEN

Total cobrado por el Oficial Receptor (Tabla "D")..... \$290,668.71
 Total cobrado por Colectores de Rentas Internas..... 21,961.08
 Total cobrado por Oficina del Hon. Tesorero de P. R. 566,345.88
 Total Cobranzas..... \$878,975.67

EXHIBIT "A"

ISABELA IRRIGATION SERVICE

STATEMENT OF CASH RECEIPTS AND NET DISBURSEMENTS FOR FISCAL YEAR
ENDING JUNE 30, 1943

RECEIPTS			
IRRIGATION REVENUES:			
Irrigation Taxes Collected:			
Previous Years.....	\$3,731.27		
Current Year.....	15,763.87	\$19,495.14	
Adjustments, Act 146 of 1937.....		2,141.00	
Surcharges.....		324.94	
Sale of Irrigation Water (Act 178 of 1941).....		426.05	
Sale of Water for Waterworks, Domestic and Industrial Purposes.....		15,188.15	
Sundry.....		57.86	
Total, Irrigation Revenues.....			\$37,633.14
HYDROELECTRIC REVENUES:			
Power Bills (Previous Years).....		\$51,727.91	
Power Bills (Current Year).....		218,614.48	
Sundry.....		1,760.17	
Total, Hydroelectric Revenues.....			272,102.56
GENERAL:			
Materials, Rents, Services, etc.....		\$13,246.32	
1/10% Special Tax (Act 120 of 1939).....		398,000.00	
Total, General.....			411,246.32
TOTAL, CASH RECEIPTS FROM OPERATION..			\$720,982.02
OTHER ITEMS:			
Transfers from Insular Treasury.....		\$140,000.00	
Cash in Transit.....		2,399.50	
Reimbursements (Contra).....		1,594.15	
Repayment-Special Disbursing Officer.....		14,000.00	
Total, Other Items.....			157,993.65
TOTAL CASH RECEIPTS FOR PERIOD.....			\$878,975.67
PLUS: Cash Balance, July 1, 1942.....			33,206.38
TOTAL, NET CASH RECEIPTS.....			\$912,182.05

EXHIBIT "A"—Continued

ISABELA IRRIGATION SERVICE

STATEMENT OF CASH RECEIPTS AND NET DISBURSEMENTS FOR FISCAL YEAR
ENDING JUNE 30, 1943

DISBURSEMENTS		
CURRENT YEAR ACCOUNTS:		
Operation and Construction:		
Payment of Salaries.....	\$69,747.59	
Payment of Labor.....	55,259.72	
Purchase of Materials Thru Bureau:		
Amount paid to Suppliers.....	\$55,884.88	
Bureau Surcharges.....	1,613.71	57,498.59
Emergency Purchases of Materials and Supplies.....	3,830.40	
Purchase of Electric Energy.....	983.97	
Transportation.....	687.64	
Per Diems and Traveling.....	2,723.39	
Telephone and Telegraph.....	537.97	
Postage.....	558.40	
Indemnity for Damages.....	217.00	
Insurance (General).....	13,976.52	
Insurance of Employees and Laborers.....	1,985.72	
Insurance—Premium on Bonds of Employees.....	205.85	
Purchase of Land.....	721.50	
Rents.....	1,091.60	
Lease of Municipal Distribution System of Aguadilla.....	2,981.14	
Sundry Expenses.....	913.38	
Reimbursements (Contra):		
Power Bills (Current Year).....	\$36.23	
Irrigation Taxes Collected—Current Year.....	1,557.39	
Adjustments, Act 146 of 1937.....	.53	1,594.15
Total, Operation and Construction.....		\$215,514.53
Obligations:		
Amortization of Bonds.....	\$300,000.00	
Amortization of Treasury Loan (Partial).....	40,000.00	
Interest on Bonded Debt.....	114,812.50	
Total, Obligations.....		\$454,812.50
NON-OPERATING:		
Adjustments—Cash in Transit.....	2,476.22	
Total, Non-Operating.....		\$2,476.22
TOTAL, CURRENT YEAR ACCOUNTS.....		\$672,803.25
ACCRUED ACCOUNTS:		
Utilization of the Water Resources.....	\$4,656.23	
P. . . Water Resources Authority.....	1,351.98	
Sundry Creditors.....	371.37	
Total, Accrued Accounts.....		6,379.58
TOTAL VOUCHERS ISSUED DURING YEAR.....		\$679,182.83
VOUCHERS IN TRANSIT, July 1, 1942:		
Bureau of Supplies, Printing, and Transportation.....	\$2,240.23	
Sundry Creditors.....	227.44	
Total, Vouchers in Transit, July 1, 1942.....		2,467.67
TOTAL AUTHORIZED FOR PAYMENT.....		\$681,650.50
LESS: Vouchers in Transit on June 30, 1943.....		6,880.20
TOTAL VOUCHERS PAID DURING YEAR.....		\$674,770.30
PLUS: Advance to Special Disbursing Officer.....		14,000.00
TOTAL, NET CASH DISBURSEMENTS.....		\$688,770.30
CASH BALANCE IN TREASURY FUND (July 1, 1943).....		\$223,411.75

ISABELA IRRIGATION SERVICE

191

EXHIBIT "B"

ISABELA IRRIGATION SERVICE

BALANCE SHEET, JUNE 30, 1943

ASSETS			
FIXED ASSETS:			
INVESTMENTS:			
Irrigation System:			
Guajataca Reservoir.....	\$1,789,880.77		
Diversion Canal.....	1,012,592.08		
Distribution System.....	717,808.40	\$3,520,281.25	
Hydroelectric System:			
Power Plant No. 1.....	133,757.48		
Power Plant No. 2.....	125,184.59		
Substations.....	24,882.29		
Transmission Lines.....	124,970.98		
Distribution Lines.....	\$337,910.86		
Less:			
Property of Municipality of			
Aguadilla under 10 years lease....	10,377.13	327,533.73	736,329.07
General Administration:			
Main Headquarters.....	53,738.80		
Telephone Lines.....	13,804.79		
Pulverizing Plant.....	1,554.65	69,098.24	
Less: Reserve for Depreciation.....		\$4,325,708.56	
		314,898.34	
TOTAL FIXED ASSETS.....			\$4,010,810.22
GENERAL EQUIPMENT.....			
Less: Reserve for Depreciation.....		\$68,626.11	
		18,963.82	49,662.29
CURRENT ASSETS:			
Cash:			
Treasurer of Puerto Rico:			
General Fund.....	223,411.75		
Special Fund.....	11,027.45		
Customers' Cash Bond Deposits.....	2,562.91		
Cash in Transit.....	-39.16		
Special Disbursing Officer.....	656.05	\$237,619.00	
Inventories:			
Materials and Supplies.....		60,206.93	
Accounts Receivable:			
Tax Levies Receivable.....	29,451.29		
General Accounts.....	59,026.35	88,477.64	
TOTAL CURRENT ASSETS.....			386,303.57
DEFERRED ASSETS:			
Deferred Tax Levies.....		\$51,982.58	
Stream Gauging.....		1,579.99	
Construction of Power Plant No. 3.....		15,586.37	
Other Items.....		7,095.75	
TOTAL DEFERRED ASSETS.....			76,244.69
DEFERRED CHARGES:			
Discount on Bonds.....		\$1,792.99	
Prepaid Insurance.....		12,038.65	
5% Premium on Construction Bonds Retired.....		68,750.00	
TOTAL DEFERRED CHARGES.....			82,581.64
TOTAL ASSETS.....			\$4,605,602.41

EXHIBIT "B"—Continued

ISABELA IRRIGATION SERVICE

BALANCE SHEET, JUNE 30, 1943

LIABILITIES			
FIXED LIABILITIES:			
BOND INDEBTEDNESS:			
Operation Period:			
Series "A" to "SS" 1952-70.....	\$750,000.00		
Series "S" to "T" 1970-71.....	150,000.00		
Series "T" to "U" 1971-72.....	100,000.00		
Series "U" to "V" 1972-73.....	150,000.00		
Series "V" 1973.....	100,000.00	\$1,250,000.00	
Refunding Bonds:			
Series "A" 1935-1945-1974.....	75,000.00		
Series "B" 1936-1946-1975.....	75,000.00		
Series "C" 1937-1976.....	75,000.00		
P. R. 2½% Isabela Irrigation Conso-			
lidation Bonds of 1938:			
Original Issued.....	\$2,625,000.00		
Less: Amortizations.....	825,000.00		
	1,800,000.00	2,025,000.00	\$3,275,000.00
INSULAR TREASURY TEMPORARY LOANS.....			1,826,208.75
TOTAL FIXED LIABILITIES.....			\$5,101,208.75
CURRENT LIABILITIES:			
Accounts Payable.....		6,880.20	
Unpaid Labor.....		323.54	
Accrued Expenses.....		15,823.47	
Accrued Interest on Treasury Loan.....		6,275.43	
Customers' Cash Bond Deposits.....		2,547.91	
TOTAL CURRENT LIABILITIES.....			31,850.55
DEFERRED CREDITS:			
Premium on Bonds.....		\$36,903.78	
TOTAL DEFERRED CREDITS.....			36,903.78
TOTAL LIABILITIES.....			\$5,169,963.08
SURPLUS:			
Operating Surplus:			
General.....	-1,967,462.46		
1/10% Special Tax (Act 120 of 1939).....	1,090,132.41	\$877,330.05	
Donated Surplus:			
Federal Government Contributions.....	\$152,969.38		
Insular Government Contributions.....	160,000.00	312,969.38	
TOTAL SURPLUS.....			-564,360.67
			\$4,605,602.41

NOTE: Items indicated with hyphen (—) represent red figures.

ISABELA IRRIGATION SERVICE

193

EXHIBIT "C"

ISABELA IRRIGATION SERVICE

STATEMENT OF OPERATING AND MAINTENANCE

July 1, 1942 to June 30, 1943

IRRIGATION SYSTEM:		
OPERATING EXPENSES:		
Guajataca Reservoir.....	\$1,443.23	
Diversion Canal.....	950.21	
Distribution System.....	11,838.59	\$14,232.03
MAINTENANCE EXPENSES:		
Guajataca Reservoir.....	358.48	
Diversion Canal.....	2,887.64	
Distribution System.....	8,567.26	11,803.38
TOTAL, OPERATION AND MAINTENANCE		\$26,035.41
HYDROELECTRIC SYSTEM:		
OPERATING EXPENSES:		
Power Plant No. 1.....	13,618.34	
Power Plant No. 2.....	10,917.32	
Substations.....	1,517.83	
Transmission Lines.....	7,565.33	
Distribution System:		
Distribution Lines:		
Primary Distribution Lines.....	2,846.68	
Secondary Distribution Lines.....	34,687.76	
Meter and Transformer Operation.....	3,054.27	
Lease of Municipal Distribution Systems.....	3,500.00	
Compensation to Municipalities.....	11,074.55	
Interconnections.....	125.94	
Purchase of Electric Energy.....	983.97	\$89,891.99
MAINTENANCE EXPENSES:		
Power Plant No. 1.....	442.54	
Power Plant No. 2.....	201.29	
Substations.....	111.12	
Transmission Lines.....	260.44	
Distribution Lines:		
Primary Distribution Lines.....	1,809.48	
Secondary Distribution Lines.....	1,654.35	4,479.22
TOTAL, OPERATION AND MAINTENANCE		\$94,371.21
GENERAL ADMINISTRATION:		
OPERATING EXPENSES:		
Main Headquarters.....	2,320.23	
Telephone Lines.....	823.30	
Garage.....	1,828.51	
General Warehouse.....	2,840.35	
Executive Division.....	9,090.10	
Accounting Division.....	22,845.46	
General Expenses.....	6,453.49	46,201.44
MAINTENANCE EXPENSES:		
Main Headquarters.....	1,396.89	
Telephone Lines.....	487.10	1,883.99
TOTAL, OPERATION AND MAINTENANCE		\$48,085.43
INTEREST:		
Interest on Bonded Debt.....		\$125,238.68
GRAND TOTAL		\$293,730.73

EXHIBIT "D"

ISABELA IRRIGATION SERVICE
INCOME STATEMENT

July 1, 1942 to June 30, 1943

IRRIGATION SYSTEM:		
OPERATING REVENUES:		
Irrigation Revenue	\$26,736.13	
Miscellaneous Irrigation Revenue	13,933.22	
Total, Operating Revenue	\$40,669.35	
Total, Operating and Maintenance Expenses	26,035.41	
Operating Profit, Irrigation System		\$14,633.94
HYDROELECTRIC SYSTEM:		
OPERATING REVENUE:		
Hydroelectric Current Revenue	259,257.07	
Miscellaneous Hydroelectric Revenue	1,425.90	
Total, Operating Revenue	260,682.97	
Total, Operating and Maintenance Expenses	94,371.21	
Operating Profit, Hydroelectric System		166,311.76
GROSS OPERATING PROFIT		\$180,945.70
Less: Total, General Operating and Maintenance Expenses		48,085.43
NET OPERATING PROFIT		\$132,860.27
NON-OPERATING CREDITS:		
Rents	\$346.09	
Profit on Sale of Materials and Supplies	192.50	
Profit on Sale of Property	471.39	
Interest on Accounts Receivable	2.54	
Sundry Revenue .....	.05	
1/10% Special Tax (Act 120 of 1939)	398,000.00	
Total, Non-Operating Credits		399,012.57
		\$531,872.84
NON-OPERATING CHARGES:		
Property Losses	\$691.76	
Total, Non-Operating Charges		691.76
GROSS INCOME		\$531,181.08
INCOME DEDUCTIONS:		
Interest on Bonded Debt		125,238.68
SURPLUS FOR YEAR		\$405,942.40
SURPLUS AT BEGINNING OF YEAR:		
Operating Surplus	—\$1,288,696.19	
Adjustments for Previous Years	5,423.74	
Adjusted Surplus for Previous Years		—1,283,272.45
TOTAL OPERATING SURPLUS		—877,330.05
DONATED SURPLUS:		
Federal Government Contributions	\$152,969.38	
Insular Government Contributions	160,000.00	
TOTAL, DONATED SURPLUS		312,969.38
TOTAL SURPLUS		\$—564,360.67

NOTE: Items indicated with hyphen (—) represent red figures.

EXHIBIT "E"

ISABELA IRRIGATION SERVICE

STATEMENT SHOWING NET CHARGES MADE TO INVESTMENT ACCOUNTS
DURING THE FISCAL YEAR 1942-43 WITH TOTALS TO DATE

Accounts	Totals June 30, 1942	Totals July 1, 1942 to June 30, 1943	Grand Totals June 30, 1943
INVESTMENTS:			
IRRIGATION SYSTEM:			
GUAJATACA RESERVOIR:			
Reservoir:			
Right of Way and Damages:			
Salaries	\$12,160.91		\$12,160.91
Lands	91,542.44	\$213.00	91,755.44
Damages	27,129.52		27,129.52
Hydrography	2,797.86		2,797.86
Test, Pits & Borings	3,930.21		3,930.21
Surveys	16,750.66		16,750.66
Geological Investigations			
Professional Services	1,490.74		1,490.74
Miscellaneous Office Expenses	2.69		2.69
Automobile Expenses	11.66		11.66
Depreciation of Equipment (Expense)	108.73		108.73
Highways	24,898.98		24,898.98
Highways (Road Camuy to San Sebastián)	8,005.27		8,005.27
Fencing	164.48		164.48
Leveling	351.51		351.51
Force Account Construction	122.95	633.52	756.47
Administration	12,358.94		12,358.94
Miscellaneous Expenses	2,950.89		2,950.89
Preliminary Surveys and Investigations	306.62		306.62
Salaries	24.39		24.39
Malaria Prevention of Reservoir	118.96		118.96
Testing of Reservoir	296.90		296.90
Premium on Insurance of Employees and Laborers	6.69		6.69
Interest during Construction (Proportion)	49,275.71		49,275.71
Operation during Construction (Proportion)	1,231.21		1,231.21
Maintenance during Construction (Proportion)	420.00		420.00
TOTALS	\$256,458.92	\$846.52	\$257,305.44
Dam:			
Materials and Supplies	\$0.57		\$0.57
M. & R. of Equipment	13,088.44		13,088.44
M. & R. of Gates & Structures	131.59		131.59
Test, Pits & Borings:			
Test Pits	1,726.97		1,726.97
Borings	13,296.43		13,296.43
Surveys	1,096.22		1,096.22
Contract Construction	314,124.20		314,124.20
Contract Construction (Extra Work)	12,269.95		12,269.95
Contract Construction (Material)	32,724.82		32,724.82
Inspection & Engineering (Contract)	22,489.47		22,489.47
Misc Office Expenses	3,978.09		3,978.09
Consulting Services	1,870.29		1,870.29
M. & R. of Buildings	340.46		340.46
Automobile Expenses	1,593.13		1,593.13
Fencing	97.82		97.82
Corral Expenses	121.08		121.08
Depreciation of Equipment (Expense)	78,132.22		78,132.22
Depreciation of Buildings, etc. (Expense)	19,577.41		19,577.41
Salaries	5.00		5.00
Buildings, Permanent	772.28		772.28
Buildings, Temporary	25.00		25.00
Temporary Telephone Lines (Maint. and Repairs)	122.55		122.55
Office Engineering	4,623.44		4,623.44
Force Account Construction	636,269.56		636,269.56
Administration	69,858.39		69,858.39
Miscellaneous Expenses	13,450.31		13,450.31
Labor	12,852.11		12,852.11
Traveling Expenses	19.45		19.45
Superintendence and Engineering	15,364.91		15,364.91
Reconstruction and Repairs caused by Storm of Sept 13, 1928	11.89		11.89
Premium on Insurance of Employees and Laborers	371.88		371.88

EXHIBIT "E"—Continued

ISABELA IRRIGATION SERVICE

STATEMENT SHOWING NET CHARGES MADE TO INVESTMENT ACCOUNTS
DURING THE FISCAL YEAR 1942-43 WITH TOTALS TO DATE

Accounts	Totals June 30, 1942	Totals July 1, 1942 to June 30, 1943	Grand Totals June 30, 1943
Dam.—Continued			
Interest during Construction (Proportion)...	\$251,991.31		\$251,991.31
Operation during Construction (Proportion)...	7,598.03		7,598.03
Maintenance during Construction (Proportion).....	2,580.06		2,580.06
TOTALS	\$1,532,575.33		\$1,532,575.33
DIVERSION CANAL:			
Right of Way and Damages:			
Salaries, etc.....	\$3,030.41		\$3,030.41
Damages.....	9,679.38		9,679.38
Lands.....	3,702.43		4,702.43
Real Estate other than Right of Way.....	20.50		20.50
Materials and Supplies.....	5,701.56		5,701.56
Transportation, Freight, etc.....	153.50		153.50
M. & R. of Equipment.....	7,623.83		7,623.83
Surveys.....	23,019.01		23,019.01
Contract Construction.....	225,417.08		225,417.08
Contract Construction (Extra Work).....	11,618.19		11,618.19
Inspection & Engineering (Contract).....	16,897.29		16,897.29
Misc. Office Expenses.....	783.56		783.56
M. & R. of Buildings.....	840.33		840.33
Automobile Expenses.....	2,624.91		2,624.91
Corral Expenses.....	2,277.62		2,277.62
Depreciation of Equipment (Expense).....	14,862.80		14,862.80
DIVERSION CANAL:			
Depreciation of Buildings, etc. (Expense)....	8,307.95		8,307.95
Highways.....	16,234.81		16,234.81
Buildings, Temporary.....	45.90		45.90
Fencing.....	180.78		180.78
Office Engineering.....	8,918.19		8,918.19
Leveling.....	351.56		351.56
Force Account Construction.....	420,420.04	\$476.72	420,896.76
M. & R. of Roads.....	4.00		4.00
Administration.....	38,221.34		38,221.34
Rents.....	3,273.46		3,273.46
Miscellaneous Expenses.....	8,499.09		8,499.09
Preliminary Surveys and Investigations.....	306.63		306.63
Surveys—Utilization of Streams.....	382.13		382.13
Salaries.....	49.00		49.00
Labor.....	30,814.80		30,814.80
Traveling Expenses.....	801.65		801.65
Superintendence & Engineering.....	7,410.91		7,410.91
Construction of Reservoir for Streams.....	578.14		578.14
Canal and Tunnel Maintenance.....	13,819.76		13,819.76
Reconstruction and Repairs caused by Storm of Sept. 13, 1928.....	266.54		266.54
Premium on Insurance of Employees and Laborers.....	303.62		303.62
Reconstruction and Repairs caused by Storm of Sept. 26-27, 1932.....	.50		0.50
Interest during Construction (Proportion)...	118,121.19		118,121.19
Operation during Construction (Proportion)...	5,083.39		5,083.39
Maintenance during Construction (Pro- portion).....	1,467.58		1,467.58
Totals	\$1,012,115.36	\$476.72	\$1,012,592.08
DISTRIBUTION SYSTEM:			
Right of Way and Damages:			
Salaries.....	\$8,126.23	-\$96.50	\$8,029.73
Damages.....	52,364.68	-\$51.31	51,713.37
Lands.....	1,798.10		1,798.10
Real Estate other than Right of Way.....	1,118.83		1,118.83
M. & R. of Equipment.....	5,184.58		5,184.58
Hydrography.....	8.25		8.25
Surveys.....	29,196.65		29,196.65
Surveys, Topography.....	23,513.25		23,513.25
Miscellaneous Office Expenses.....	1,338.18		1,338.18
M. & R. of Buildings.....	482.89		482.89
Automobile Expenses.....	1,676.53		1,676.53

ISABELA IRRIGATION SERVICE

197

EXHIBIT "E"—Continued

ISABELA IRRIGATION SERVICE

STATEMENT SHOWING NET CHARGES MADE TO INVESTMENT ACCOUNT
DURING THE FISCAL YEAR 1942-43 WITH TOTALS TO DATE

Accounts	Totals June 30, 1942	Totals July 1, 1942 to June 30, 1943	Grand Totals June 30, 1943
DISTRIBUTION SYSTEM:—Continued			
Corral Expenses.....	1,858.58		1,858.58
Depreciation of Equipment (Expense).....	8,330.11		8,330.11
Depreciation of Buildings, etc.....	6,969.33		6,969.33
Highways.....	43.34		43.34
Fencing.....	1,032.72	\$70.82	1,093.54
Buildings, Permanent.....	3,733.31		3,733.31
Buildings, Temporary.....	8.46		8.46
Office Engineering.....	16,872.62		16,872.62
Leveling.....	868.68		868.68
Force Account Construction.....	411,655.51	-9,504.55	432,150.96
Administration.....	34,577.61		34,577.61
Rents.....	993.67		993.67
Miscellaneous Expenses.....	5,348.22		5,348.22
Preliminary Surveys and Investigation.....	306.62		306.62
Traveling Expenses.....	143.98		143.98
Superintendence and Engineering.....	16,120.82		16,120.82
Canal and Tunnel Maintenance.....	65.63		65.63
Reconstruction and Repairs caused by Storm of Sept. 13, 1928.....	1,083.96		1,083.96
Premium on Insurance of Employees and Laborer.....	2,748.60		2,748.60
Interest during Construction (Proportion).....	38,422.53		38,422.53
Operation during Construction (Proportion).....	3,727.55		3,727.55
Maint. during Construction (Proportion).....	933.91		933.91
Irrigation Commission.....	17,292.06	62.95	17,355.01
Totals.....	\$727,926.99	-10,118.59	\$717,808.40
TOTALS, IRRIGATION SYSTEM.....	\$3,529,076.60	-8,795.35	\$3,520,281.25
HYDROELECTRIC SYSTEM:			
POWER PLANT No. 1:			
Right of Way and Damages:			
Salaries.....	\$238.95		\$238.95
Studies for Power Plant No. 2.....	178.89		178.89
Studies for Power Plant No. 3.....	18.61		18.61
Real Estate other than Right of Way.....	350.00		350.00
M & R of Equipment.....	112.14		112.14
Surveys.....	528.13		528.13
Miscellaneous Office Expenses.....	120.20		120.20
M & R of Buildings.....	.94		.94
Automobile Expenses.....	143.58		143.58
Depreciation of Equipment (Expense).....	655.35		655.35
Highways.....	6,084.28		6,084.28
Fencing.....	13.49		13.49
Buildings, Permanent.....	9,360.48		9,360.48
Buildings, Temporary.....	134.78		134.78
Roads, Bridges, Culverts, etc.....	1,188.83		1,188.83
Office Engineering.....	1,839.23		1,839.23
Leveling.....	157.79		157.79
Force Account Construction.....	90,733.86		90,733.86
Administration.....	8,209.95		8,209.95
Rents.....	62.47		62.47
Miscellaneous Expenses.....	574.62		574.62
Labor.....	12.88		12.88
Preliminary Surveys and Investigations.....	137.64		137.64
Traveling Expenses.....	44.60		44.60
Superintendence & Engineering.....	153.19		153.19
Reconstruction and Repairs caused by Storm of Sept. 13, 1928.....	491.99		491.99
Premium on Insurance of Employees and Laborers.....	2.42		2.42
Interest during Construction (Proportion).....	6,703.47		6,703.47
Operation during Construction (Proportion).....	3,845.00		3,845.00
Maintenance during Construction (Pro- portion).....	1,659.72		1,659.72
Totals.....	\$133,757.48		\$133,757.48

EXHIBIT "E"—Continued

ISABELA IRRIGATION SERVICE

STATEMENT SHOWING NET CHARGES MADE TO INVESTMENT ACCOUNTS
DURING THE FISCAL YEAR 1942-43 WITH TOTALS TO DATE

Accounts	Totals June 30, 1942	Totals July 1, 1942 to June 30, 1943	Grand Totals June 30, 1943
POWER PLANT No. 2:			
Federal Donation:			
Materials and Supplies.....	\$9,867.53		9,867.53
Highways.....	17,129.11		17,129.11
Building, Permanent.....	8,900.30		8,900.30
Miscellaneous Expenses.....	1,133.27		1,133.27
Labor.....	27,999.30		27,999.30
Superintendence & Engineering.....	6,019.67		6,019.67
Services' Fund:			
Right of Way & Damages:			
Salaries.....		153.13	153.13
Damages.....		50.00	50.00
Real Estate other than Right of Way.....		681.00	681.00
Equipment.....		34,416.31	34,416.31
Force Account Construction.....		18,834.97	18,834.97
Totals.....	\$71,049.18	54,135.41	\$125,184.59
SUBSTATIONS:			
Right of Way and Damages:			
Salaries.....	\$23.55		\$23.55
Real Estate other than Right of Way.....	396.00		396.00
M. & R. of Equipment.....	10.20		10.20
Surveys.....	61.54		61.54
Miscellaneous Office Expenses.....	13.54		13.54
M. & R. of Buildings.....	.09		.09
Automobile Expenses.....	31.75		31.75
Depreciation, of Equipment (Expense).....	116.26		116.26
Transportation, Freight, etc.....	8.00		8.00
Fencing.....	56.65		56.65
Buildings, Permanent.....	798.45		798.45
Office Engineering.....	161.12		161.12
Leveling.....	14.35		14.35
Force Account Construction.....	21,283.43		21,283.43
Administration.....	738.72		738.72
Rents.....	5.68		5.68
Miscellaneous Expenses.....	53.91		53.91
Preliminary Surveys and Investigations.....	12.52		12.52
Traveling Expenses.....	4.18		4.18
Superintendence & Engineering.....	14.37		14.37
Reconstruction and Repairs caused by			
Storm of Sept. 13, 1928.....	20.63		20.63
Premium on Insurance of Employees and			
Laborers.....	32.28		32.28
Interest during Construction (Proportion).....	550.90		550.90
Operation during Construction (Proportion).....	318.40		318.40
Maintenance during Construction (Proportion).....	155.77		155.77
Totals.....	\$24,882.29		\$24,882.29
TRANSMISSION LINES:			
Right of Way and Damages:			
Salaries.....	\$295.63		\$295.63
Damages.....	630.33		630.33
M. & R. of Equipment.....	97.45		97.45
Surveys.....	1,735.26		1,735.26
Miscellaneous Office Expenses.....	110.00		110.00
M. & R. of Buildings.....	.82		.82
Suspense Account.....	33.46		33.46
Automobile Expenses.....	148.35		148.35
Corral Expenses.....	19		19
Depreciation of Equipment (Expense).....	587.14		587.14
Office Engineering.....	1,539.22		1,539.22
Leveling.....	137.12		137.12
Force Account Construction.....	94,861.72		94,861.72
Administration.....	6,545.32		6,545.32
Rents.....	54.29		54.29
Miscellaneous Expenses.....	519.10		519.10
Preliminary Surveys and Investigations.....	338.06		338.06
Traveling Expenses.....	115.87		115.87

ISABELA IRRIGATION SERVICE

199

EXHIBIT "E"—Continued

ISABELA IRRIGATION SERVICE

STATEMENT SHOWING NET CHARGES MADE TO INVESTMENT ACCOUNTS
DURING THE FISCAL YEAR 1942-43 WITH TOTALS TO DATE

Account	Totals June 30, 1943	Totals July 1, 1942 to June 30, 1943	Grand Totals June 30, 1943
TRANSMISSION LINES:—Continued			
Superintendence & Engineering.....	148.97		148.97
Reconstruction and Repairs caused by Storm of Sept. 13, 1928.....	1,266.69		1,266.69
Premium on Insurance of Employees and Laborers.....	32.17		32.17
Interest during Construction (Proportion).....	5,056.78		5,056.78
Operation during Construction (Proportion).....	2,921.70		2,921.70
Maintenance during Construction (Pro- portion).....	361.26		361.26
Materials and Supplies.....	6,352.05		6,352.05
Salaries.....	1,082.03		1,082.03
Totals.....	\$124,970.98		\$124,970.98
DISTRIBUTION LINES:			
Right of Way and Damages:			
Salaries, etc.....	\$101.80		\$101.80
Damages.....	918.42		918.42
Materials and Supplies.....	637.94		637.94
Transportation, Freight, etc.....	554.29		554.29
M. & R. of Equipment.....	30.05		30.05
Surveys.....	2,786.02		2,786.02
Miscellaneous.....	49.28		49.28
M. & R. of Buildings.....	25		25
Suspense Account.....	197.41		197.41
Automobile Expenses.....	779.06		779.06
Depreciation of Equipment (Expense).....	837.93		837.93
Office Engineering.....	474.53		474.53
Leveling.....	42.28		42.28
Force Account Construction.....	147,036.20	\$5,373.57	152,409.77
Real Estate other than Right of Way.....	150.00		150.00
Administration.....	2,754.59		2,754.59
Rents.....	16.73		16.73
Preliminary Surveys and Investigations.....	181.18		181.18
Miscellaneous Expenses.....	165.15		165.15
Traveling Expenses.....	832.89		832.89
Reconstruction and Repairs caused by Storm of Sept. 13, 1928.....	747.18		747.18
Premium on Insurance of Employees and Laborers.....	485.08		485.08
Purchase of Municipal Distribution System at:			
Hatillo.....	601.00		601.00
Camuy.....	4,358.98		4,358.98
Quebradillas.....	3,819.93		3,819.93
Añasco.....	7,085.55		7,085.55
Isabela.....	13,235.94		13,235.94
Moca.....	1,001.00		1,001.00
Aguadilla (Partial).....	7,561.61		7,561.61
Rincón.....	1,002.00		1,002.00
Aguada.....	4,502.97		4,502.97
Improvements and Repairs of Urban Distribution System at:			
Hatillo.....	6,406.47	523.72	6,930.19
Camuy.....	7,869.06	1,124.20	8,993.26
Quebradillas.....	5,684.14	557.42	6,241.56
Añasco.....	9,089.13	468.53	9,557.66
Aguada.....	7,905.47	503.18	8,408.65
Rincón.....	3,766.09	167.80	3,933.89
Isabela.....	11,746.61	1,083.05	12,829.66
Aguadilla.....	45,434.99	4,636.96	50,071.95
Moca.....	3,866.63	470.41	4,336.94
Superintendence and Engineering.....	76.74		76.74
Electric Municipal Distribution System at Aguadilla under 10 year lease (June 20, 1936 to June 19, 1946).....	10,377.13		10,377.13
Interest during Construction (Proportion).....	1,648.76		1,648.76
Operation during Construction (Proportion).....	266.52		266.52

EXHIBIT "E"—Continued

ISABELA IRRIGATION SERVICE

STATEMENT SHOWING NET CHARGES MADE TO INVESTMENT ACCOUNTS
DURING THE FISCAL YEAR 1942-43 WITH TOTALS TO DATE

Accounts	Totals June 30, 1943	Totals July 1, 1942 to June 30, 1943	Grand Totals June 30, 1943
DISTRIBUTION LINES:—Continued			
Maintenance during Construction (Pro- portion).....	\$466.21		\$466.21
Flat Rate Installations.....	5,450.93		5,450.93
Totals.....	\$323,002.02	\$14,908.84	\$337,910.86
TOTALS, HYDROELECTRIC.....	\$677,661.95	\$69,044.25	\$746,706.20
GENERAL ADMINISTRATION:			
Main Headquarters.....	\$52,867.07	\$871.73	\$53,738.80
Telephone Lines.....	13,765.30	39.49	13,804.79
Pulverizing Plant.....	1,554.65		1,554.65
TOTALS, GENERAL ADMINISTRATION.....	\$68,187.02	\$911.22	\$67,098.24
	\$4,274,925.57	\$61,160.12	\$4,336,085.69
Less: Contingent Liability (Lease of Electric Distribution System at Aguadilla).....			10,377.13
TOTAL, INVESTMENT, JUNE 30, 1943.....			\$4,325,708.56

“WAR EMERGENCY PROGRAM”

In an effort to relief the critical and emergent conditions of the economy of Puerto Rico which have resulted as a direct consequence of the present war, the Insular Legislature, on November 27, 1942 approved Act No. 16 of the Special Session.

One of the characteristics of the emergency is an appreciable increase in unemployment. Private industry as well as public and private construction activities have been seriously curtailed as a result of abnormal conditions in the maritime communications and of the restrictions on the use of construction materials prescribed by the War Production Board.

Act No. 16 created the Insular Emergency Council, composed of the Hon. Governor, the Hon. Auditor and the Commissioners of all the Departments of the Insular Government. This council is authorized to draft and direct an ample emergency work program, with a view to putting an end to unemployment, which will provide an opportunity to work to the largest possible number of unemployed persons.

The following construction projects are included among the activities authorized to be undertaken under the work program: construction, repair, maintenance and improvement of highways, roads, streets, buildings, public utilities, recreational facilities and other miscellaneous municipal projects.

The Department of the Interior has been entrusted with the responsibility of the development, promotion and execution of all construction projects of the Emergency Program. The organization of the administrative personnel which is to be in charge of this work is well under way at the time of this writing.

The following tabulation includes only those projects approved by the Insular Emergency Council and turned over to this Department for execution prior to June, 30, 1943. Projects marked with asterik have already been placed in operation at this data.

Town	Description of Project	Appropriation
Islandwide.....	Improvement, Repair and Maintenance of Roads and Bridges..	\$200,000.00
Islandwide.....	Construction of Bridle Paths.....	400,000.00
Islandwide.....	Repair of Public Buildings.....	210,000.00
Maunabo.....	Canalization of Stream.....	350.00
Maricao.....	Repair of streets.....	2,743.00
Ciales.....	Repair of streets.....	3,720.00
Ciales.....	Repair of streets.....	3,820.00
Ciales.....	Repair of streets.....	-3,820.00
Ciales.....	Repair of streets.....	6,000.00
Aibonito.....	Repairs to Public Square.....	2,023.40
Aibonito.....	Improvements to Cemetery.....	1,031.40
Adjuntas.....	Construction of Bridge.....	3,548.00
Adjuntas.....	Repair of streets.....	8,000.00
Vega Baja.....	Improvements to Sewerage System.....	16,811.00
Utua.....	Repairs to Municipal Cemetery.....	7,937.00
Rio Grande.....	Improvements to Municipal Cemetery.....	7,530.00
Mayagüez.....	Repairs of streets.....	8,755.00
Mayagüez.....	Canalization of "La Salud" Creek.....	3,936.80
Comerio.....	Repair of streets.....	22,782.80
Cayey.....	Improvements to Public Square.....	4,000.00
Barranquitas.....	Improvements to Cemetery.....	5,117.50
Jayuya.....	Improvements to Cemetery.....	10,150.00
Corozal.....	Canalization of Creek.....	3,392.00
Cayey.....	Repair of streets.....	20,000.00
Cayey.....	Improvements to Cemetery.....	20,000.00
Villalba.....	Repair of streets.....	1,068.00
Jayuya.....	Extension of Water Supply System.....	2,894.20
Lares.....	Extension of Water Supply System.....	5,282.00
Utua.....	Repair of streets.....	10,649.00
Ponce.....	Repair of streets.....	25,981.00
Ponce.....	Canalization of "La Muerte" Creek.....	11,800.00
Ciales.....	Canalization of "Sana Muertos" Creek.....	29,700.00
Peñuelas.....	Improvements to Water Supply System.....	19,770.00
Patillas.....	Extension of Water Supply System.....	5,700.00
Aibonito.....	Repairs to Municipal Hospital.....	2,076.00
Santa Isabel.....	Repairs to Municipal Hospital.....	9,900.00
	Total.....	\$1,100,288.10

SERVICE OF CLAIMS, ADVICE AND LEGAL ASSISTANCE

The Service of Claims, Advice and Legal Assistance is entrusted with the work of studying the legal aspect of all such cases requiring immediate attention by the Commissioner, Assistant Commissioner and the heads of the bureaus and divisions of this Department. During the fiscal year 1942-1943 the Service rendered numerous verbal and written legal opinions. A great deal of claims were investigated and studied in order to advise as to the rights of the claimants against The People of Puerto Rico. The Director of the Service assumed the representation of the Commissioner in various hearings held before different offices of the Insular Government, such as the Public Service Commission and the Civil Service Commission.

In order to carry out the construction and widening of insular roads and bridges, and the compliance of the provisions of laws directing the Commissioner to acquire lands and buildings, the Service studied, prepared and handled, in cooperation with the Department of Justice, numerous condemnation proceedings. The Director of the Service cooperated with the Department of Justice in several cases, before the district courts, in which the Commissioner of the Interior was a party. The Service drafted the bills, in which this Department was interested, to be introduced in the Legislature. It also prepared the reports of the bills that were submitted by the Governor of Puerto Rico for recommendation.

The Department of the Interior has been advocating the approval of several legislative measure with the purpose of expediting the work, specially in order to cooperate with the war effort. In the course of the year 1943-44 the following acts were approved, which were drafted and presented by this Department:

1. Act No. 120, approved May 12, 1943. The owner of a private car, used for private service, was responsible only for the damages caused by negligence only when the owner himself was driving his motor vehicle. The Act makes the owner liable for the damages caused by negligent operation of said vehicle when his agents or employees, duly authorized to drive the vehicle, cause damages.

2. Act No. 51, approved May 9, 1943. The purpose of the Act is to direct the Insular Police, whenever there is an accident in which

a public automobile which is the working tool of his owner is involved, to give notice of the accident within five days to the insurance company with the car is insured, and this notification will be considered as the notification required by the insurance companies.

3. Act No. 177, approved May 15, 1943. This Act includes the Colón Park, of Aguadilla, Puerto Rico, under the maintenance, control and administration of the Service of Parks and Recreation, created by Act No. 46, approved April 24, 1942.

4. Act No. 128, approved May 12, 1943. This Act appropriates the sum of \$26,000 to be used by the Insular Sewerage Service to continue the works that said Service initiated, in accordance with Act No. 16, approved November 21, 1941.

5. Act No. 122, approved May 12, 1943. This Act creates a Committee on Design of Public Works for the preparation of advanced plans and specifications of public improvements, either during the present war or after the war. One hundred thousand dollars are appropriated in order to carry out the purposes of the Act.

6. Act No. 91, approved May 12, 1943. This Act authorizes the Commissioner of the Interior to handle in the courts, in the name and in representation of The People of Puerto Rico, all condemnation proceedings in order to carry out the construction of roads and bridges, without the previous declaration of public utility by the Executive Council of Puerto Rico.

7. Act No. 200, approved May 15, 1943. This Act amends Act No. 143, approved May 15, 1937, as amended, and provides that from the proceeds of the tax on gasoline the Commissioner of the Interior may devote up to the sum of \$2,000,000 for the maintenance and repairs of highways, roads and bridges.

8. Act No. 198, approved May 15, 1943. This Act authorizes the Commissioner of the Interior to prepare, with the approval of the Governor, a new General Specifications for the Contracting of Insular Public Works.

9. Act No. 58, approved May 10, 1943. This Act appropriates the sum of \$20,000 to continue irrigation and hydroelectric investigations and surveys in that part of the Island, bounded by the Guajataca River, on the West, and the dividing line between the municipalities of Arecibo and Hatillo, on the East; that is, including those lands in the municipalities of Hatillo, Camuy and Quebradillas, capable of being benefited by irrigation.

10. Act No. 36, approved May 3, 1943. This Act appropriate the sum of \$10,000 to complete the construction of the water supply system for the town of Moca.

11. Act No. 119, approved May 12, 1943. This Act amends several sections of the Automobile Law in order to correct and remedy certain deficiencies of the latter.

12. Act No. 28, approved April 29, 1943. This Act amends the act that established the Service of Parks and Recreation with the purpose of authorizing said Service to enter into agreements with other agencies or instrumentalities of the Insular or Federal Government, in order to construct parks, playgrounds and athletic fields.

13. Act No. 53, approved May 9, 1943. This Act provides that the Commissioner of the Interior shall take charge of the maintenance of the Guerrero Road and of the reinforced concrete bridge over the bed of Los Cedros brook. This road gives access to hydroelectric plants Nos. 2 and 3 of the Isabela Irrigation Service.

14. Act No. 127, approved May 12, 1943. This Act appropriates the sum of \$200,000 for the purchase or expropriation of necessary lands and buildings in order to carry out the Post-War Program of Public Works, with the advice of a board formed by the Commissioner of the Interior, the Director of the Puerto Rico Planning, Urbanizing and Zoning Board, the Executive Director of the War Emergency Program, the Director of the Bureau of the Budget and another member who will be appointed by the Governor of Puerto Rico.

INSULAR SEWERAGE SERVICE

To initiate the work of the Insular Sewer Service, created by Act No. 16, approved by the Legislature of Puerto Rico in 1941, the sum of \$10,000 was appropriated. This sum was spent in accordance with the budget for the year 1942-43, approved by the Insular Sewerage Board on May 12, 1942 as follows:

Salaries:

Executive Director -----	\$4,200.00	
Engineer's Aide -----	2,400.00	
Secretary Stenographer -----	1,200.00	
		\$7,800.00

General Expenses:

Material and Office Equipment -----	500.00	
Travel expenses and Subsistence -----	1,400.00	
Miscellaneous expenses -----	300.00	
		2,000.00

Total -----	\$10,000.00
-------------	-------------

The appropriation of \$10,000 was only sufficient to prepare a survey of the physical plants of the existing sewerage systems, so as to determine their operating conditions and render the pertinent recommendations to the Legislature and Governor of Puerto Rico so as to make possible the appropriation of the necessary funds to carry out the work of repairs and improvement leading to the establishment of an efficient service on all existing sanitary sewerage systems over the Island.

A detailed report, dated January 8, 1943, was prepared and submitted to the Legislature and the Governor of Puerto Rico, in which a brief account is given of the existing operating conditions of each sanitary sewerage system, as well as specific recommendation as to the necessary work of improvement to be executed in order to remedy deficiencies which may be considered as public nuisance.

Following the recommendation of the above mentioned report, all effort has been made toward the execution of three (3) main projects, considered of utmost importance to the public health and feasible, taking advantage of war emergency funds set aside by the Legislature to carry out public work programs compatible with the present emergency situation.

These projects are:

- A. Regular maintenance and repairs work to Insular Sewerages Systems.
- B. Improvements to existing sanitary sewerage Systems.
- C. Construction of new sewerage systems to Municipalities lacking this service.

The project for the maintenance and repairs to the sewerage systems amounts to \$58,000, of which, about \$45,000 will be devoted to salaries and wages, and the balance, will be used for the purchase of the mechanical equipment, suitable for cleaning sewer pipes.

The project for the improvements of existing sanitary sewerage systems covers 44 existing plants and amounts to \$1,085,300. This project comprises the work for the extension of the outfall sewers in towns located at the littoral, and also includes work for the improvement of sewerage treatment plants in those towns where the sewage discharges into brooks or rivers that do not afford sufficient dilution.

The project for new plant consists of the construction of sanitary sewerage systems in the towns of the Island at present lacking of this service. This project amounts to \$1,396,352.

I have no doubt that these three (3) projects, will receive the approval of both the Insular Planning Board and the Insular Emergency Council, taking into consideration that these are capital projects providing a permanent solution to a sanitary problem long existing over the urban zones of the Island. In the execution of work of this nature are equally interested the Insular Government as well as the Federal Agencies dealing with public works, and it is due to this fact that it is considered now the proper opportunity for the setting aside of Insular funds available in order to obtain the necessary help from Federal Agencies, so as to carry out these extensive public work programs.

It is worthy of stating that it is perfectly possible to execute these projects at present notwithstanding the actual emergency condition, due to the fact that cement sewer pipe manufactured in Puerto Rico will be used and that great care will be exercised to eliminate to a minimum the use of critical materials in the design of treatment plants.



UNIVERSITY OF ILLINOIS-URBANA



3 0112 109086709